Geopolitics and Planning for a High-End Fight

NATO and the Baltic Region

Dr. Ralph S. Clem*

Disclaimer: The views and opinions expressed or implied in the *Journal* are those of the authors and should not be construed as carrying the official sanction of the Department of Defense, Air Force, Air Education and Training Command, Air University, or other agencies or departments of the US government. This article may be reproduced in whole or in part without permission. If it is reproduced, the *Air and Space Power Journal* requests a courtesy line.

This article would'The author wishes to thank two anonymous reviewers of an earlier draft of this article for their insightful and very helpful comments. The author is solely responsible for any shortcomings

In a remarkably brief period, a serious challenge to the national security interests of the United States and its allies has emerged in Europe. This new threat emanates from a militarily resurgent and increasingly aggressive Russia, openly manifested in early 2014 by its seizure of Crimea from neighboring Ukraine—the first time since the end of the Second World War that a European state has annexed territory from another European state. The subsequent spread and intensification of Russian-sponsored fighting to regions of eastern Ukraine, including the direct engagement of Russian military units, have had catastrophic consequences, with thousands of military and civilian deaths, hundreds of thousands of internally displaced persons, and widespread damage to infrastructure. Compounding this ongoing conflict is a dramatic increase in Russian Air Force activity in airspace adjacent to North Atlantic Treaty Organization (NATO) countries, including long-range patrols in the Atlantic and Pacific oceans as well as an ever more ambitious cycle of combined-arms military exercises by the Russian armed forces on a scale not seen since the collapse of the Soviet Union in 1991. Given these events, one must recognize that *at the extreme*, the possibility of armed conflict between the Russian Federation and NATO exists to a much higher degree than has been true since the end of the Cold War.

This article argues that the dynamic risk presented by Russia requires NATO air forces in general and the US Air Force in particular to adapt quickly to these evolving strategic and tactical realities. One key element in planning for air operations against a technologically advanced adversary such as Russia is to consider the best locations from which to fight, a question that impinges directly on the effectiveness and survival of NATO air units. Accordingly, this study begins by describing the geopolitical background of the current heightened tensions between NATO and Russia and then focuses on how this increasingly fraught situation relates to defending the alliance's most vulnerable member states: the three Baltic countries of Estonia, Latvia, and Lithuania.[1] The analysis then considers forward-basing options for NATO air

force units, including those proposed in recent studies, in light of known threats and the realities of military geography.

NATO and the New Russian Threat

To appreciate the suddenness with which Russia has emerged on the scene as a real geostrategic opponent for the United States, one should consider the 2012 Defense Strategic Guidance (DSG).[2] Catherine Dale and Pat Towell note that this document is "explicitly intended to reshape future Department of Defense (DOD) priorities, activities, and budget requests for the following decade."[3] In the section that assesses the present and future global security environment, the DSG overwhelmingly emphasizes the "*rebalance toward the Asia-Pacific region*" (emphasis in original), the clear implication of which is to give US military capabilities in Europe less prominence (although this is couched in language crafted to obscure that fact).[4] Notably, given subsequent developments to the contrary, the same portion of the document declares that "our engagement with Russia remains important, and we will continue to build a closer relationship in areas of mutual interest and encourage it to be a contributor across a broad range of issues."[5] Yet, by 2014 Robert Legvold, the respected scholar of Russian foreign policy, having taken note of developments after 2012, would write that "the crisis in Ukraine has pushed the two sides over a cliff and into a new relationship, one not softened by the ambiguity that defined the last decade of the post–Cold War period, when each party viewed the other as neither friend nor foe. Russia and the West are now adversaries."[6] Finally as an indication of how dramatically things have changed in terms of US national security interests since 2012, in his confirmation testimony before Congress in July 2015, Gen Joseph Dunford, the current chairman of the Joint Chiefs of Staff, stated that he viewed Russia as an "existential threat to the United States," ahead of all his other concerns, including China, North Korea, and the Islamic State.[7] Subsequent to General Dunford's testimony, Russia's military intervention in Syria has no doubt underscored that view.

Although numerous analyses have addressed Russia's motives in undertaking these moves, this article contends that appropriate responses by the United States and its NATO allies deserve more emphasis, especially as regards planning for air operations against such a highly capable opponent. Indeed, given the instability in many regions of the world and the proliferation of sophisticated weapons systems, the DSG calls for the United States to develop further its ability to project military power into areas where technologically advanced defenses make such operations risky—what have become known as antiaccess/area-denial (A2/AD) environments. In this regard, the only two such A2/AD states specifically mentioned in the DSG are China and Iran.[8] Russia, however, is very definitely an A2/AD state—one that actually has contiguous borders with five NATO member states and is relatively close to several others. This geographical fact, discussed in detail below, presents some unique complications for military planners, especially concerning the NATO Baltic region.

Stephen Walt convincingly argues that the aggressive foreign policy and military actions of Russian president Vladimir Putin against some of his neighbors handed a declining and drifting NATO a revived raison d'être that especially benefits the Baltic member states, which have eagerly sought this kind of attention from the alliance—particularly as the Russian threat has become more of a reality.[9] If Russia's war against NATO-aspirant Georgia in 2008 was not enough of a harbinger, certainly Moscow's more recent attacks in Ukraine and the much higher operational tempo of Russian forces along NATO's eastern frontier have energized the alliance, with the focus on defending the highly exposed Baltic region. President Barack Obama made that clear during his visit to the Estonian capital, Tallinn, in September 2014, where he affirmed NATO's commitment under Article 5 of the North Atlantic Treaty to come to the defense of the Baltic countries.[10] This theme was enhanced and operationalized at the NATO Wales Summit that followed the president's Tallinn remarks. There, NATO leaders approved a readiness action plan that

> include[s] measures that address both the continuing need for assurance of Allies. . . . [Said] assurance measures include continuous air, land, and maritime presence and meaningful military activity in the eastern part of the Alliance, both on a *rotational* basis . . . and the [establishment] of a Very High Readiness Joint Task Force (VJTF) . . . that will be able to deploy within a few days to respond to challenges that arise, particularly at the periphery of NATO's territory (emphasis added).[11]

This forward-leaning posture vis-à-vis NATO's defense of the Baltic region is encouraged by strong support for such a strategy by, among others, NATO, the Baltic countries themselves, the US government, and some parts of the national security community in this country.[12] In turn, this new strategic direction stimulates demands from the alliance's political leadership on NATO's military establishment to provide operational (i.e., tactical) plans to deter Russian aggression and, if that fails, to carry out an actual military response. From the first of these new requirements has emerged the VJTF and a series of exercises involving units assigned thereto; an enhanced Baltic air policing mission that monitors and in many cases intercepts Russian military aircraft operating in the region; and, for US forces specifically, a number of deployments and exercises under the rubric Operation Atlantic Resolve.[13] These latter include US Air Force units deploying from the continental United States (CONUS) to European bases as theater security packages as well as United States Air Forces in Europe (USAFE) units operating from forward bases, including Ämari in Estonia and Šiauliai in Lithuania, for various exercises or to take up Baltic air policing rotations. Further US commitments to bolster the confidence of the Baltic countries have been forthcoming via the European Reassurance Initiative announced by President Obama in June 2014, which includes, among many other items, funds for improvements at Ämari, Šiauliai, and Lielvārde (in Latvia) airfields (and at Łask Air Base in Poland).[14] More recently, Secretary of Defense Ashton Carter announced in June 2015 that the United States would begin temporarily prepositioning equipment for an armored brigade in central and eastern European NATO countries, with each of the Baltic states agreeing to host company- to battalion-sized elements, thereby facilitating the rotation of American forces into the region for training and exercises.[15] Finally, in August 2015, the US Air Force dispatched

F-22 Raptors to Europe for the first time, officially "to train alongside other U.S. Air Force aircraft, joint partners, and NATO allies," but the geopolitical message sent by the deployment surely did not go unnoticed in Moscow.[16]

Considering a High-End Fight with Russia

Since many countries now possess technologically advanced air defense systems, the critical need to develop and exercise ways to engage potential enemies in what has been termed a "high-end" fight is undeniable. Emphasizing "that the Nation relies on [the Air Force] to be first in for the high-end fight," the service's senior leadership has on numerous occasions stressed the urgency of enhancing readiness and training to the demanding standard necessary to prevail in such conflicts.[17] If it comes to that, a war against Russia would certainly be a high-end fight from the outset. The sweeping force-modernization programs undertaken by Russia have continued and will continue to significantly up the ante in terms of any military confrontation with that country in the Baltic region (or elsewhere), including the use of NATO airpower. As Michael Kofman notes, "Russia is militarily the strongest it has been since the Cold War, fielding the most capable, modernized, and well-funded force it is likely going to have for the foreseeable future."[18] Such game-changing offensive and defensive technologies demand innovative thinking about the conduct of complex air operations. On the one hand, if anything, the imperative to be creative when it comes to the actual employment of airpower has increased over time, and the pace of such change necessitates continuing debate about how to adapt to more challenging threat scenarios. On the other, as discussed below, one must take care to place any military innovation—whether technological or operational—in the geographic context of where a potential conflict might become a reality.

From both a strategic and an operational perspective, a key aspect of planning options for the employment of land-based airpower is the obvious need for airfields from which to fight. Typically, air forces are concentrated at top-tier airfields (main operating bases [MOB]) with such features as permanent maintenance and refueling facilities, munitions storage, perhaps hardened and dispersed aircraft shelters or revetments, combat support or combat-enabling functions (such as intelligence and operations staff), and at least some provision for air base defense (depending on the proximity to the enemy). Because of the high cost of maintaining MOBs—and in certain cases, political sensitivities to their presence—these bases tend to be relatively few in number and therefore present an adversary with a short and easy-to-locate target list.

One concept that would mitigate the downside to the limited number of MOBs involves planning to spread air assets to other, secondary airfields and carry on the fight from there. During the Cold War, the epitome of this approach was USAFE's collocated operating base system wherein about two-thirds of units deploying from the CONUS would bed-down at airfields widely dispersed across NATO countries (especially the United Kingdom and Germany) with pre-positioned fuels and munitions.[19] More recently, two journal articles have offered interesting proposals to take the agile-basing model one step further by untethering operations from geographi-

cally fixed support elements (other than runways and parking) by refueling and rearming aircraft from mobile support teams airlifted into what otherwise could be a bare base (forward arming and refueling points [FARP]).[20] Both of these articles focus on situations in which US Air Force assets (principally fighter aircraft) would be deployed in an A2/AD scenario wherein the threat to MOBs would be high, one involving conflict with China and the other against Russia. Ideas such as the FARP initiative make very good sense and might be crucial to success in such situations, allowing in-place NATO forces to counter an aggressor (e.g., Russia) at least until additional assets flow from mobilizing units in European countries and active, Guard, and Reserve units from the CONUS.

How Far Forward Is Forward?

Indeed, one of the above-referenced articles posits a FARP operation at Ämari Air Base in Estonia, which is worth examining in light of the realities of military geography and the capabilities of opposing forces in a NATO-Russia conflict in the Baltic region. In other words, the question raised here is not *how* a high-end fight with Russia should take place if it comes to pass but *where* it should occur. More generally, analyzing this particular FARP scenario in its actual context may facilitate making sound decisions on basing that take into account the full range of factors involved.

The first of these factors is geography, which has dealt the Baltic countries a tough hand to play when it comes to national defense. The three NATO states in the Baltic region combined have about the same area and population as the state of Missouri. Further, Estonia and Latvia border Russia proper whereas Lithuania borders the Russian exclave of Kaliningrad (see the map on the next page). These basic facts of small geographic size and population and their precarious location, especially as it relates to Russia, have shaped the history of the Baltic countries and are crucial to understanding their present-day geopolitical situation. For our purposes in this section, the key point is that this reality renders them highly vulnerable to attack by a variety of means from their powerful neighbor to the East—so vulnerable that even agile, untethered air operations from the territory of the Baltic countries would be extremely risky and require, at a minimum, a level of defensive protection that, given the scarcity of such systems, could be better utilized elsewhere.

Courtesy of the University of Texas Libraries, the University of Texas at Austin, http://www.lib.utexas.edu/maps/europe/balticseaarea.jpg

Several specific threats to air operations would apply to air bases *regionwide* should the Baltic countries be attacked by Russia; they are, in declining order of importance, short-range ballistic missiles, air attack with standoff air-to-surface munitions, surface-to-air missiles, ground attack, and attacks by airborne or special operations

forces. Further complicating the threat picture, of course, is the strong likelihood that several of these attack modes might present themselves simultaneously or nearly so. Finally, the relative paucity of FARP-capable airfields in the Baltic countries restricts the options for such operations and reduces the enemy's target list to more manageable numbers. If one follows Lt Col Robert Davis's criteria for minimum FARP operations—and admittedly absent firsthand knowledge—there appear to be only three candidate airfields in Estonia, five in neighboring Latvia, and another five in Lithuania.[21]

Regardless of the number of possible FARP dispersal bases in the NATO Baltic region itself, all are highly problematic in terms of survival in a conflict with Russia. Without doubt the most significant threat to conducting NATO air operations from Baltic-region bases is the Russian Iskander short-range ballistic missile (NATO: SS-26 Stone). Robert Farley places the Iskander at the top of his list of the most serious threats that Russia presents to NATO—and with good reason.[22] The system is road-mobile and capable of operating independently; moreover, with a range of up to 250 miles, the missiles could strike all possible Baltic FARP bases from launchers inside Russia proper or in Russia's Kaliningrad exclave.[23]

Baltic-region airfields from which FARP operations might be conducted are also at risk from attack by the Russian Air Force—in particular, the SU-24 (NATO: Fencer) strike aircraft and variants of the Sukhoi family of multirole fighters (NATO: Flanker and Fullback) employing precision or unguided air-to-surface ordnance from the large variety of this type of weapon available in the Russian inventory. NATO's defensive counterair would be complicated by the short distances involved; for example, an SU-24 flying a low-altitude attack profile at speed would be overhead Ämari Air Base just 10 minutes after crossing the Russo-Estonian border. Additional threats to NATO aircraft operating in the Baltic region come from the increasingly more effective and longer-range Russian surface-to-air missile (SAM) air defense systems, especially the S-300 (NATO: SA-10 Grumble) family and the newer S-400 (NATO: SA-21 Growler). These mobile SAMs, if deployed inside Russia's western frontier, could acquire and engage aircraft over the eastern half of Estonia and Latvia, with the longer-range variants capable of covering virtually all of both countries, especially against a target with a large radar cross section (such as the C-17 in the FARP scenario). Further complicating NATO's challenges from Russian air defenses in the Baltic region is the huge military buildup in the Kaliningrad exclave, which may include batteries of the S-400 that could engage NATO aircraft operating from Šiauliai (the original and main Baltic air policing base) or other air bases in Lithuania or even eastern Poland.

Although greatly reduced in size by a series of military reforms in the post-Soviet period, Russia's ground forces can still endanger its much smaller neighbors, in particular the Baltic states. Depending on demands elsewhere, the Russian Army could bring to bear between two and six motorized rifle brigades along its western frontier with Estonia and Latvia, a force sufficient to challenge NATO's ability to ensure the safety of the few airfields in the region from which operations might be conducted. Should these formations penetrate any significant distance into Estonian or Latvian territory, they would bring with them the dense SAM defenses organic to Russian Army maneuver units, rendering air operations in the vicinity even more dangerous.

Finally, special operations forces (in Russian, *Spetsnaz*) and airborne troops have assumed a much more central role in Russian military planning. As their adroit employment in the seizure of Crimea demonstrated, these forces are capable of rapid, stealthy, and effective operations. One could reasonably expect that at least one *Spetsnaz* brigade would be available for operations against NATO in the Baltic region, as well as one regiment of airborne / air assault troops. It would also be prudent to assume that, given Russia's long and close involvement in the Baltic region and the presence there of a million ethnic Russians, its foreign and military intelligence agencies have more than adequate knowledge of the NATO military posture in that area.

Ultimately, in the calculus of military capabilities of NATO allies and possible adversaries in the Baltic region, the NATO Baltic states possess insufficient military strength with which to defend themselves against an attack from Russia.[24] The armed forces of the three Baltic countries include no tanks, no combat aircraft, and only short-range SAMs. What Luis Simón characterizes as "the lack of conventional military balance against Russian power" on the part of the Baltic countries propels the geopolitical anxiety manifest in the NATO Baltic states now that Russia presents a bona fide and growing threat to the survival of those countries.[25] Indeed, as Stephen Blank details, in the huge *Zapad* ("West") 2013 exercises, Russian military forces conducted "classic large-scale conventional theater operations involving combined and joint operations" in a scenario involving the Baltic region.[26] For the time being, the facts of geography and the potential threat from Russian forces render the forward deployment of NATO air assets into bases in that region perilous indeed in the event of hostilities between the alliance and Russia.

Conclusion
Airpower and Geopolitical Angst in the NATO Baltic States

The foregoing dire threat situation to the NATO Baltic states presented by the Russian armed forces raises the following question: why even think about fighting from there? The answer lies in the realm of geopolitics and especially in the accession of the Baltic states to NATO. After two centuries of Russian rule during the czarist era and harsh decades under the Soviet regime (with a period of independence between the two world wars truncated by forced annexation into the USSR, followed by mass deportations and significant loss of life), it comes as no surprise that the Baltic countries have serious national security concerns and that these concerns would center around their relationship with Russia. Once the USSR dissolved, all three newly independent Baltic states had to work out bilateral arrangements with post-Soviet Russia in the areas of economic linkages, citizenship issues regarding ethnic Russians desiring to remain in the region, withdrawal of Russian (former Soviet) military personnel, and questions of territorial delimitation. None of these went smoothly, and tensions between the Baltic countries and Russia inevitably resulted, further underscoring the need for these fledgling states to integrate themselves into the emergent European Union and into the best collective security option available: NATO. After joining NATO's Partnership for Peace in 1994 as a

precursor to full membership, the Baltic countries pushed aggressively for accession, having to counter the belief that their small size and lack of military capability would be seen as a liability for the alliance and that because of "their geographic position, they would be *impossible to defend*" (emphasis added).[27] They proved their bona fides by volunteering troops to Balkans peacekeeping operations, organizing their own regional defense collaborations, and continuing to press their case diplomatically until achieving their goal of full NATO membership in 2004. Not resting on those laurels, since accession, all of the Baltic countries have participated to the fullest possible extent in NATO exercises and out-of-area deployments, including the wars in Iraq and Afghanistan.[28]

One of the key manifestations of NATO membership for the Baltic countries has been the establishment and expansion of NATO air operations in the region. Immediately upon formal accession of the Baltic states to NATO, the alliance initiated the Baltic air policing mission at Šiauliai, said mission involving the rotation of fourship fighter packages from different NATO air forces to provide quick-reaction-alert capability over Baltic regional airspace. In 2014, in response to the Crimean crisis, the alliance quadrupled the number of fighter aircraft involved and added air bases in Estonia (Ämari) and Poland (Malbork) as part of this mission. Even though the number of aircraft was later trimmed, with heightened tensions between NATO and Russia from early 2014 on, the number of Baltic air policing quick-reaction-alert sorties increased dramatically as Russian air activity over the Baltic intensified, and NATO added supporting Airborne Warning and Control System patrols with its own and national aircraft.[29] Furthering the commitment on the part of NATO to vigorously defend its Baltic member states, a wide range of military exercises in the region (e.g., Saber Strike) is ongoing and increasingly larger and more complex. Most of these now have an air component, and some—such as the Baltic Regional Training Events—include upgraded exercising in close air support, interoperability, and command and control, all of which would be crucial for a multinational force in a high-end fight.[30]

This very high level of NATO air activity in eastern Europe no doubt pays a number of dividends, certainly offering realistic joint training in areas where hostilities might occur, hopefully deterring a potential aggressor, and showing the flag to allies. But one danger in all of this is that rotating aircraft to bases in the Baltic countries creates the impression that NATO air forces might choose to actually fight from there if the present crisis (or some future crisis) escalates into hostilities with Russia. As described above, even with options such as the FARP plan, should such circumstances unfold, air bases in the Baltic countries themselves would almost certainly prove unusable at best. To plan air operations under these conditions, whether agile or not, involves exposing precious resources and lives to an untenable risk until the threat from Russian attacks is greatly reduced.

If the Baltic countries are not the place to forward-base air assets in a conflict with Russia, then where would that place be? Poland appears the better option for FARPs in such a scenario. In addition to Polish Air Force MOBs, that country includes some 50 FARP-capable airfields. Poland is about 80 percent larger in area, having a population over six times the size of the NATO Baltic region, and its border with Russia is only along the Kaliningrad exclave (see the map above). Although the

frontage with Kaliningrad is not insignificant by any means, certainly one of NATO's highest priorities in any conflict with Russia would entail neutralizing Moscow's forces in the exclave. Poland's large and well-equipped army and a first-rate combat air force, with NATO reinforcements arriving in short order, would be vital to such a task. That this latter course may be what NATO is actually thinking is evidenced by the first VJTF exercise involving actual movement of troops (Noble Jump), wherein these rapid-reaction forces deployed to westernmost Poland.[31] With Kaliningrad neutralized, NATO air forces could be employed to counter any Russian moves across the Estonian and Latvian borders, perhaps in the meantime retarding Russian ground forces with interdiction missions from air bases in southern and western Poland or other Central European countries.[32]

The pressure brought to bear on NATO planners by the alliance's political leadership to devise ways to defend the Baltic region against a Russian invasion is intense, even in light of a good counterargument that such an invasion would not be in Moscow's best interest.[33] Regardless, such a defense is almost certainly not realizable in the short term. Forward-basing US and other NATO air units into those countries if hostilities were either imminent or under way, given the realities of military geography and the balance of forces in the region, would be imprudent to say the least. These realities certainly do not invalidate the FARP concept; rather, as noted above, this might be a very effective way to engage an enemy in a high-end fight, but it demands that planners consider carefully the geographic constraints dictated by the threat. Put another way, it would be unwise to allow strategic views emerging from geopolitical considerations to determine tactical planning for a high-end fight. ✪

Notes

1. The term *Baltic*, which connotes the three countries of Estonia, Latvia, and Lithuania, is common usage. Obviously, however, many other countries (including Russia) border the Baltic Sea, and Poland, with its long Baltic Sea coastline, is certainly a key player in any NATO-Russia scenario. The use of the term *NATO Baltic* refers here to Estonia, Latvia, and Lithuania.

2. US Department of Defense, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense* (Washington, DC: Office of the Secretary of Defense, January 2012), http://archive.defense.gov/news/Defense_Strategic_Guidance.pdf.

3. Catherine Dale and Pat Towell, *In Brief: Assessing the January 2012 Defense Strategic Guidance* (*DSG*), CRS Report for Congress R42146 (Washington, DC: Congressional Research Service, 13 August 2013), 1.

4. US Department of Defense, *Sustaining U.S. Global Leadership*, 2.

5. Ibid., 3.

6. Robert Legvold, "Managing the New Cold War: What Moscow and Washington Can Learn from the Last One," *Foreign Affairs* 93, no. 4 (July/August 2014): 74.

7. Matthew Rosenberg, "Joint Chiefs Nominee Warns of Threat of Russian Aggression," *New York Times*, 9 July 2015.

8. US Department of Defense, *Sustaining U.S. Global Leadership*, 4–5.

9. Stephen M. Walt, "NATO Owes Putin a Big Thank-You," *Foreign Policy*, 4 September 2014, http://foreignpolicy.com/2014/09/04/nato-owes-putin-a-big-thank-you/.

10. "Remarks by President Obama to the People of Estonia" (Washington, DC: White House, Office of the Press Secretary, 3 September 2014), https://www.whitehouse.gov/the-press-office/2014/09/03/remarks-president-obama-people-Estonia.

11. "Wales Summit Declaration," NATO, 5 September 2014, http://www.nato.int/cps/en/natohq/official_texts_112964.htm.

12. For example, see Luke Coffey and Daniel Kochis, "The Baltic States: The United States Must Be Prepared to Fulfill Its NATO Treaty Obligations," Heritage Foundation, 29 September 2015, http://www.heritage.org/research/reports/2015/09/the-baltic-states-the-united-states-must-be-prepared-to-fulfill-its-nato-treaty-obligations.

13. "Operation Atlantic Resolve Fact Sheet 2014 and 2015," United States European Command, 29 January 2015, http://www.eucom.mil/operation-atlantic-resolve.

14. "EUCOM Provides Update on the European Reassurance Initiative," United States European Command, 20 April 2015, http://www.eucom.mil/media-library/article/33026/eucom-provides-update-on-the-european-reassurance-initiative.

15. "News Transcript: Joint Press Conference with Secretary Carter, Lithuanian Minister of Defense Oleskas, Latvian State Secretary of Defense Sarts and Estonian Minster of Defense Mikser in Tallinn, Estonia," Department of Defense, 23 June 2015, http://www.defense.gov/News/News-Transcripts/Transcript-View/Article/607062.

16. Lara Seligman, "US F-22s Arrive in Europe," *DefenseNews*, 31 August 2015.

17. Senate, *Hearing of the Defense Subcommittee of the Senate Appropriations Committee: Air Force Posture Hearing*, 113th Cong., 2nd sess., 2 April 2014, http://www.ngaus.org/sites/default/files/TRANSCRIPT-%20SAC-D%20Air%20Force%20Posture%20Hearing%202APR14.pdf.

18. Michael Kofman, "Putin's Strategy Is Far Better Than You Think," *War on the Rocks*, 7 September 2015, http://warontherocks.com/2015/09/putin-is-a-far-better-strategist-than-you-think/.

19. The definitive work is Donald E. Lewis et al., *A Perspective on the USAFE Collocated Operating Base System*, RAND Note N-2366-AF (Santa Monica, CA: RAND Corporation, July 1986), http://www.rand.org/content/dam/rand/pubs/notes/2007/N2366.pdf.

20. See Lt Col Robert D. Davis, "Forward Arming and Refueling Points for Fighter Aircraft: Power Projection in an Antiaccess Environment," *Air and Space Power Journal* 28, no. 5 (September–October 2014): 5–28, http://www.airpower.maxwell.af.mil/digital/pdf/articles/2014-Sep-Oct/F-Davis.pdf; and Maj Gen Charles Q. Brown, Jr., Brig Gen Bradley D. Spacy, and Capt Charles G. Glover III, "Untethered Operations: Rapid Mobility and Forward Basing Are Keys to Airpower's Success in the Antiaccess/Area-Denial Environment," *Air and Space Power Journal* 29, no. 3 (May–June 2015): 17–28, http://www.airpower.maxwell.af.mil/digital/pdf/articles/2015-May-Jun/SLP-Brown_Spacy_Glover.pdf.

21. The minimum requirement is a 6,000-feet x 75-feet hard-surface runway. Weight-bearing capacity is also relevant for C-17 operations but is not specified and probably is not a factor in the cases involved here. See Davis, "Forward Arming and Refueling Points," 14–15; and AirportNavFinder, accessed 18 June 2015, http://airportnavfinder.com. The airfields include Estonia (Ämari, Tallinn, and Pärnu), Latvia (Jūrmala, Lielvārde, Daugavpils, Liepāja, and Riga), and Lithuania (Vilnius, Kaunas, Šiauliai, Pajuostis, and Palanga). Any potential NATO FARP airfield, of course, would need to be technically evaluated. Several of these airfields are civilian airports, and three are their respective country's international airports. Finally, under desperate circumstances, some abandoned airfields not included here could be pressed into service.

22. Robert Farley, "Five Russian Weapons of War NATO Should Fear," *National Interest*, 6 July 2014, http://nationalinterest.org/feature/five-russian-weapons-war-nato-should-fear-10816.

23. Brown, Spacy, and Glover, "Untethered Operations," 20, includes a figure showing notional ballistic missile threat rings centered well inside Russia (on or near Moscow), giving the appearance that the Baltic countries are outside Russian SRBM range, which is not the case.

24. Luis Simón, "Assessing NATO's Eastern European 'Flank,'" *Parameters* 44, no. 3 (Autumn 2014): 67–79.

25. Ibid., 73.

26. Stephen Blank, "What Do the Zapad 2013 Exercises Reveal? (Part One)," *Eurasia Daily Monitor* 10, no. 177 (4 October 2013), http://www.jamestown.org/single/?tx_ttnews%5Btt_news%5D=41449&no _cache=1#.VWNR1EtgMYU.

27. Andres Kasekamp, *A History of the Baltic States* (New York: Palgrave Macmillan, 2010), 192.

28. Ibid., 192–93.

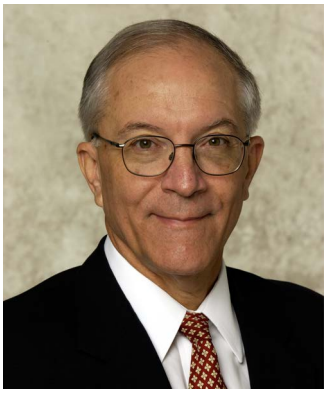
29. Ian Davis, "NATO to Increase Baltic Air Patrols," NATO Watch, 9 April 2014, http://www.natowatch.org/node/1456. In addition to NATO's own Airborne Warning and Control System aircraft, France contributed an aircraft, and other air forces provided air-refueling assets.

30. "A Key Air Training Event for NATO in the Baltics," Supreme Headquarters Allied Powers Europe, 2 April 2014, http://www.aco.nato.int/a-key-air-training-event-for-nato-in-the-baltics-wraps-up.aspx.

31. "NATO VJTF (Spearhead) Exercise Noble Jump Media Access, 9–18 June 2015," Supreme Headquarters Allied Powers Europe, 19 May 2015, http://www.aco.nato.int/exercise-noble-jump.

32. A true wild card in any such scenario is the possibility that Belarus, long a close ally of Moscow, either would join Russia in an attack against NATO or would permit Russian forces to transit its territory, thus exposing another flank for Polish and NATO defenders. Although unlikely, geography affords NATO the defensive depth it would need to counter such a move while bringing its own forces forward.

33. Robert Person, "6 Reasons Not to Worry about Russia Invading the Baltics," *Washington Post*, 12 November 2014, https://www.washingtonpost.com/news/monkey-cage/wp/2015/11/12/6-reasons-not-to-worry-about-russia-invading-the-baltics/.



Dr. Ralph S. Clem

Dr. Clem (BA, San Diego State College; MA, PhD, Columbia University) is Emeritus Professor of Geography at Florida International University, where he was also director of the Center for Transnational and Comparative Studies. His research and publications focus on the political geography of countries of the former Soviet Union as well as on Eurasian geopolitics. Dr. Clem was in the Air Force on both active and Reserve duty, serving as an intelligence officer for three flying units, a strategic air analyst at the National Security Agency, and the mobilization assistant to the commander, Air Intelligence Agency. He retired from the Air Force Reserve in 2004 as a major general.

Let us know what you think! Leave a comment!

Distribution A: Approved for public release; distribution unlimited.

http://www.airpower.au.af.mil