

THE RUSSIAN INVASION OF THE **CRIMEAN PENINSULA**

2014–2015

A Post–Cold War Nuclear Crisis Case Study

National Security Report

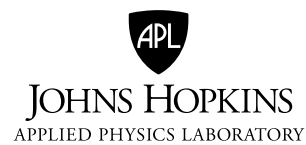


Jonathon Cosgrove

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Foreword

Since nuclear weapons were conceived, their primary role has evolved in fits and starts in response to changes in the international security environment. They were originally pursued in a race to prevent Nazi Germany from acquiring them first in World War II. Some three months after victory in Europe, development of these weapons was completed and they were immediately used against Japan to shorten the Pacific War and prevent the large numbers of casualties anticipated in the planned invasion of the Japanese home islands. In the aftermath of Japan's subsequent surrender, they were viewed as instruments of warfighting that enabled the United States to safely downsize its overseas military presence in the face of the Soviet Union's superior conventional might that threatened the free nations of Western Europe. After the Soviet Union conducted its first nuclear test in 1949, an unconstrained bilateral arms race began, and the arsenals of the United States and Soviet Union eventually rose to the dizzying height of some thirty thousand and forty thousand weapons, respectively. As the arsenals grew, their purpose evolved to emphasize deterring war, rather than fighting war, and both sides became locked in a mutual assured deterrence relationship. But it was also clear that there were pressures to maintain an arsenal well beyond the needs of assuring a devastating retaliation. In any event, with the end of the Cold War and demise of the Soviet Union, the perceived importance of nuclear weapons diminished greatly in the United States. Although Russia depended even more on nuclear weapons as its conventional capabilities atrophied, it faced grave economic difficulties in maintaining its huge inherited nuclear arsenal. As a result, the arsenals of both the United States and Russia were significantly reduced. When the war on terrorism took center stage a decade later, in the United States all things nuclear became secondary considerations in national security strategy.

As we enter the fourth decade of the post–Cold War era, national security is once again focusing on peer and near-peer competitors (read: Russia and China) and nuclear weapons are regaining their previous Cold War position at the foundation of national security strategy. While perceptions of nuclear threats are rising, current circumstances and the Cold War differ in many, many dimensions. So rather than simply reverting to Cold War thinking, it is timely to review the necessary and proper roles of nuclear weapons as we look ahead over the coming decades.

Toward that end, the John Hopkins University Applied Physics Laboratory has undertaken a research program to understand the actual and potential roles that nuclear weapons do and might play in support of national security strategy. Their role in deterring nuclear strikes by other nuclear states is well-plowed ground, although there remain serious differences regarding the arsenal size and composition, as well as elements of associated nuclear doctrine, necessary to underwrite deterrence. By contrast, what is far less understood is the role of nuclear weapons in crisis initiation, progression, and outcome.

Our research program is designed to fill this important intellectual gap by challenging the continued relevance of Cold War thinking in several critical dimensions. In particular, we question continued applicability of quantitative research—based on Cold War crises—that emphasizes the correlation of superiority in the nuclear balance with favorable crisis outcomes. We have been partially motivated by the work of Matthew Kroenig, who in an important analysis of Cold War nuclear crises concludes that

the side with the larger nuclear arsenal is more likely to achieve its objectives in a crisis.¹ However, we are unconvinced that his findings apply to the current era. In addition, there is great uncertainty in estimates of the probability of “winning” a crisis. In our first publication under this research program, we demonstrate methods for appropriately quantifying such uncertainty and presenting it in a manner accessible to policy makers.² Further statistical analyses are planned for post–Cold War nuclear crises, which are arguably better indicators of the roles of nuclear weapons now and in the future. We recognize that because there have been only a handful of these crises, statistical analyses will have large uncertainties in results. However, our perspective is that this is not a reason to abandon such analyses. Large uncertainties reflect the reality of our limited understanding of nuclear crises.

To complement our statistical analyses, we are conducting case studies of post–Cold War nuclear crises. In contrast to historical statistical analyses, case studies provide a richness of context and detail that, in the ideal, can establish causal linkages between nuclear weapons and crisis outcomes. This paper, which addresses the role of nuclear weapons in the Crimean crisis, represents our first such study. We first describe the chronology of the crisis in detail. While nuclear weapons do not directly figure into much of this chronology, it provides the necessary foundation for understanding the crisis and the episodes in which nuclear weapons did play a clear role. We describe these episodes and conclude by addressing two questions:

- (1) What roles, if any, did nuclear weapons play in the progression and outcome of the crisis?
- (2) Which characteristics of nuclear weapons were influential in their roles in the crisis?

The appendix focuses on coding the variables that are often invoked in the academic literature to describe crises and is intended to support future statistical analyses. Other planned case studies will address the crisis involving the North Korean nuclear weapons program, the Doklam Plateau crisis between India and China, and the series of India–Pakistan crises over Kashmir.

Finally, we are concerned that brinkmanship has been unreasonably dominant in attempts to explain the broad variety of behaviors exhibited in nuclear crisis. We will assess the ability and limitations of this theory to contribute to our understanding of post–Cold War nuclear crises and investigate alternative theories that might better explain behaviors and outcomes in nuclear crises. We will try to answer the question of whether it makes sense to try to develop an overarching theory of behavior in nuclear crises or, alternatively, to develop a set of complementary theories whose applicability depends on crisis characteristics.

All this work is motivated by the belief that a more complete understanding of the roles of nuclear weapons—that includes both crisis management as well as deterrence—will lead to wiser decisions regarding nuclear capabilities development and deployment, arms control policy, crisis management, and myriad other aspects of national security strategy.

James Scouras, APL Senior Scholar

¹ Kroenig, “Nuclear Superiority and the Balance of Resolve.”

² Rooker and Scouras, *Nuclear Crisis Outcomes*.

Summary

The Russian invasion and annexation of Crimea was a crisis that heightened tensions between the world's two largest nuclear powers—the Russian Federation and the United States. Despite explicit nuclear posturing, the episode in Crimea is often overlooked as a nuclear crisis, being instead considered a crisis between Russia and Ukraine. But when analyzed as a confrontation between Russia and the United States, the invasion of Crimea points to notable implications for the nuclear balance, resolve, and crisis management.

Ukraine's removal of Yanukovich from office saw Russia take immediate military action to invade and occupy the Crimean Peninsula. In response, the United States sought to maintain Ukraine's territorial integrity. The crisis held a grave importance for Russia, which viewed it less as a fight against Ukraine and more as a confrontation with the West over ground that held deep military, national, cultural, and symbolic significance. Russia's military gains on the ground were maintained throughout the crisis under its threats to use nuclear weapons or deploy nuclear weapons to the peninsula. Meanwhile, despite public disagreement among US policy and military leaders, the United States' responses remained diplomatic and economic.

Nuclear weapons played a recurring role in the progression and outcome of the crisis in Crimea. Even before the crisis began, nuclear weapons were a central factor. Ukraine's disarmament in exchange for national security guarantees in the 1990s meant that, even if nuclear weapons were never invoked by actors during the crisis itself, the crisis would nevertheless carry implications for future disarmament and nonproliferation efforts. Vladimir Putin claimed to have considered a nuclear alert at the outset of the crisis, and on the day of the Crimean referendum to leave Ukraine, Russia televised a thinly veiled nuclear threat against the United States. Russia's military actions and maneuvers before the referendum sought to deter intervention against the invasion of Crimea. After the referendum, Russia escalated military actions on the peninsula and leveraged nuclear threats to solidify the new status quo on the ground. These threats and posturing continued into 2015, parallel to another crisis in Donbass. The United States was the primary target of Russian nuclear posturing during this period. While it is not clear that the United States would have sought to intervene if Russia had not drawn nuclear red lines, it is evident that Russia did not accept US nonintervention as a given and took steps to deter intervention through both public and private channels.

Three characteristics of the Russian nuclear arsenal were influential in their roles throughout the crisis: nonstrategic nuclear weapons, dual-use weapons, and standing military doctrines for nuclear first use. The nonstrategic element of the Russian arsenal carried a special significance due to Russia's standing military doctrine at the time and the development of Russian strategies inflating the role of nonstrategic nuclear weapons in otherwise conventional confrontations. The dual-use nature of Russia's weapons associated with the nonstrategic nuclear arsenal played an exacerbating role in nuclear posturing during the crisis, provoking tense public exchanges around the possible deployment of nuclear forces into occupied Crimea. Combined with direct threats to use nuclear force against any attempt to return Crimea to Ukraine, vagueness around the presence of nuclear arms escalated tensions. Finally, Russia's standing doctrine allowing for nuclear first use was an important contribution to the plausibility of Russian threats.

In-depth case analysis of Russia's invasion of Crimea and the ensuing crisis demonstrates how several variables played instrumental roles in the progression and outcome, carrying implications for the nature

of confrontation between nuclear powers. While the United States had overall nuclear superiority, this did not translate into greater resolve or victory. The Russian Federation not only viewed the confrontation with greater gravity and had the advantage of proximity but also maintained nonstrategic nuclear superiority (at the time, the United States had 180 nonstrategic bombs, while Russia had around 2,000 nonstrategic warheads).³ The deterrent potential of this nonstrategic nuclear superiority was buttressed by a military doctrine for first use in response to conventional force, demonstrated through nuclear exercises and leveraged during the course of the crisis through nuclear threats, allusions, and the movement of dual-use weapons on the Crimean Peninsula. These findings suggest that the academic community should consider nonstrategic nuclear balance and the perceived plausibility of first-use threats in addition to overall arsenal balance in future studies of nuclear crises.

Finally, for the policy community, the crisis in Crimea suggests that Russia will be willing to brandish its nonstrategic nuclear weapons in combination with its first-use policy to deter the United States in future crises. While Crimea might not have been viewed as a vital national interest to the United States, were this a NATO nation, that calculation would likely have been different. Future strategy development, war games, and national security exercises should account for Russia's nonstrategic nuclear arsenal and how it is leveraged to threaten and intimidate the United States and its allies. The United States needs a strategic approach to deterring aggressive Russian revisionist actions in the future, and that approach needs to account for the threat of nonstrategic nuclear weapons.

³ Kristensen and Norris, "Worldwide Deployments of Nuclear Weapons, 2014"; and Kristensen and Norris, "Russian Nuclear Forces, 2014."

Introduction

In early 2014, the Russian Federation responded to the culminating Euromaidan movement in Ukraine by invading, occupying, and annexing Crimea. Acting without markings and accompanied by official denials from the Kremlin, Russian forces isolated and occupied Ukrainian political and military sites on the peninsula. Russia's actions sparked a crisis much larger than that in Ukraine, with US leaders considering military responses, including "increasing military exercises, forward deploying additional military equipment and personnel, and increasing [US] naval, air, and ground presence,"¹ all amid aggressive nuclear posturing from Moscow. Viewing Ukraine as a stage for its confrontation with the United States and Europe, Russia, in addition to the invasion, advanced nuclear messaging and threats meant to deter any intervention on behalf of Ukraine.

Thus, while Ukraine was, at the time of the crisis, no longer a nuclear weapons state, nuclear arms nevertheless played an important role in the crisis. This case study examines the context and historical background of the crisis, presents a chronology of events and actions within the crisis, and examines what nuclear weapons characteristics played a role in the crisis. Specifically, this study poses two analytical questions related to the role of nuclear weapons in the crisis:

- (1) What roles, if any, did nuclear weapons play in the progression and outcome of the crisis?
- (2) Which characteristics of nuclear weapons were influential in their roles in the crisis?

Driven by Russian strategy and developments through the course of the crisis, and the lack of direct US nuclear posturing in response, the answers to these questions focus on the role and characteristics of Russia's nonstrategic nuclear arsenal. The findings of this in-depth case study affirm and

reinforce the findings of Frankel, Scouras, and Ullrich, who in 2017 emphasized the impact of non-strategic asymmetry and the importance of "access to proportionate rungs on the escalatory ladder." They concluded that Russia's reliance on its "modernized nonstrategic nuclear weapons arsenal, with its large numerical advantage over NATO and low-yield, high-accuracy, and other attractive warfighting characteristics, is central to its national security strategy. These weapons, along with Russia's post-Cold War nuclear doctrine . . . presage a challenging future for the United States and NATO."²

Finally, the appendix includes a coding and discussion of variables to support future statistical analyses, including a close examination of the publicly available data on the nuclear balance, and presents assumptions that address inherent ambiguities.

Coding the Crisis

The International Crisis Behavior (ICB) project maintains the data set of record for the analysis of international crises.³ This analysis deviates from the coding of the ICB data in two ways. First, the United States is considered to be an actor in the crisis, making it a nuclear crisis between the Russian Federation and the United States. The ICB codes the crisis as being only between Russia and Ukraine, while acknowledging under the variable "U.S. involvement" that there was "U.S. semi-military involvement"—a level of crisis involvement which, when the United States is not a crisis actor, is second only to "U.S. direct military intervention."⁴ Including the United States as an actor is also justified by the perceptions and messaging of the Russian government, which

¹ Lake, "General Splits with Obama over Ukraine."

² Frankel, Scouras, and Ullrich, *Nonstrategic Nuclear Weapons at an Inflection Point*, 25.

³ Brecher et al., *International Crisis Behavior Data Codebook*.

⁴ Brecher et al., *International Crisis Behavior Data Codebook*; and Brecher and Wilkenfeld, *A Study of Crisis*.

carried not only a near-singular fixation on the potential role of the United States but also nuclear threats against both the United States and Ukraine. Moscow's prior experience with "color revolutions" shaped the policy statements, actions, and threats recounted in this analysis, leading the Russian Federation to perceive the crises in Ukraine as confrontations with the United States and the European Union (EU).⁵

Second, this analysis treats the Russian Federation's invasion and annexation of the Crimean Peninsula as a crisis separate from the war in the Donbass region of eastern Ukraine (an ongoing conflict as of this writing). In contrast, the ICB data codes the staggered invasion of Ukraine as a single crisis ("Crimea-Donbass"), beginning with the removal of Ukrainian president Viktor Yanukovich on February 22, 2014, and ending with the ejection of Ukrainian forces from Debaltseve on February 18, 2015. The ICB data codes the Debaltseve offensive as having "terminated the crisis for both Ukraine and Russia," after which the situation remained "more or less stalemated."⁶ While this analysis agrees with the crisis initiation date for Crimea, it argues that the clear demarcation between the invasion of Crimea and that of Donbass in Russian policy statements⁷ and Western responses⁸ merits considering the two as separate, albeit concurrent, crises. While this creates overlap and interaction between escalating violence in Donbass and the latter part of the Crimea crisis, the post-annexation

nuclear posturing in question explicitly identifies Crimea as the subject. However, this does not mitigate the possibility that heightening tensions and violence in Donbass⁹ influenced the intensity of threats around occupied Crimea.

Historical Background

The historical relationship between Ukraine and Russia is as deeply contentious as it is familial. Russia owes a significant share of its cultural, religious, and political heritage to cities and regions in Ukraine. Both countries share political parentage with the Kievan Rus, and the conversion of much of the Slavic world to Orthodox Christianity began in Crimea.¹⁰ After that time, the territory that would later become Ukraine was persistently contested and divided among competing imperial powers until the western regions of Ukraine held by Poland were taken by Bolsheviks. During World War I, the Bolsheviks, with Red Army support and after repeated victories against a Ukrainian nationalist government in Kyiv, took control of the territory that became the Ukrainian Soviet Socialist Republic (UkSSR). The importance of Ukrainian agriculture meant that the country enjoyed relatively lenient treatment under the USSR system before the ascent of Joseph Stalin. Once in power, Stalin brought farm collectivization, grain quotas, Russification, and persecution, culminating in a devastating famine (the Holodomor, 1932–1933) and the deaths of between three and ten million Ukrainians.¹¹

Beyond its religious significance, the history of Crimea betrays the peninsula's shared political and strategic significance. Conquered by the Russian Empire in 1774, the Crimean Peninsula was later a

⁵ Felgenhauer, "Putin: Ukraine Is a Battlefield"; Felgenhauer, "Putin Pushing Back"; Felgenhauer, "Kremlin Sees Ukraine Crisis as Part of Overall US-Led Assault on Russia"; Tsygankov, "Russia's International Assertiveness," 39; Trenin, "Russia's Spheres of Interest, Not Influence"; and AOWG, *Ambiguous Threats, Phase 2*, 9.

⁶ Brecher et al., "Crimea-Donbass," 3–4.

⁷ Zygar, *All the Kremlin's Men*; and Zinets, "Poroshenko Names New Defence Chiefs."

⁸ Rachman, "Nuclear Gun Is Back on the Table"; "Joint Statement of the NATO-Ukraine Commission"; and Stoltenberg, "Press Conference."

⁹ UN OCHA, *Ukraine*; and "Death Toll up to 13,000."

¹⁰ "Russian President Gave His Reasons"; and AOWG, *Ambiguous Threats, Phase 1*, 7.

¹¹ Magocsi, *History of Ukraine*, 591–600; Subtelny, *Ukraine: A History*, 415; Coyle, *Russia's Border Wars*, 25–27; and UN General Assembly, "Annex to the Letter."

vital bulwark against the coalition of Great Britain, France, Sardinia, and Turkey during the Crimean War (1853–1856). Sevastopol's defense against Nazi invasion during World War II served as a symbol of Russian strength, earning the city the honorific "Hero City." This history informed Russia's perception that Crimea was a critical buffer against foreign powers and that losing the peninsula would undermine Russia's status as a great power.¹²

Throughout World War II, Ukrainian nationalist political organizations and insurgent forces pursued Ukrainian independence from the USSR, with some factions working with Germany while others fought against both the Nazi and Red armies.¹³ Stalin did not consider Ukraine an indispensable part of Russia during the war, at one point authorizing an offer of Ukraine to the German forces in exchange for the safety of Russia itself.¹⁴ Nevertheless, the aftermath of World War II brought significant changes to the social and political structure of the UkSSR. Industrialization was accelerated, Ukrainian nationalists were deported, and millions of ethnic Russians came to the UkSSR from across the USSR to rebuild and industrialize the country, causing long-standing demographic shifts in the Ukrainian population.¹⁵

Industrialization saw the USSR become an important center for the Soviet arms industry and, in turn, Soviet politics. After Stalin's death, although the peninsula's population was only 22 percent Ukrainian, Crimea was gifted by the Russian Soviet Federative Socialist Republic to the UkSSR in 1954 in celebration of the three hundredth anniversary of the 1654 Treaty of Pereyaslav between Russia

and Ukraine, stressing the unity of Ukrainians and Russians.¹⁶ Public reasons for the transfer of Crimea included unity, geography (Figure 1), and sufficiency of administration, but there were also likely political motivations between Nikita Khrushchev and Soviet power brokers in the UkSSR.¹⁷ De-Stalinization under Khrushchev also saw some revival of Ukrainian national identity and language, followed by another cycle of Russification under Leonid Brezhnev.¹⁸

Under Mikhail Gorbachev's liberalized policies of *glasnost* (openness) and *perestroika* (restructuring), reduced censorship meant residents of the UkSSR could reconnect with Ukrainian diaspora abroad and opposition political materials could be published.¹⁹ The 1986 disaster at the Chernobyl Nuclear Power Plant in northern Ukraine and the initial cover-up accelerated the political backlash in the UkSSR, including steps toward increased sovereignty from the USSR.²⁰ Soon after the Soviet system collapsed in Poland, Hungary, and Czechoslovakia, Ukraine declared sovereignty from the USSR on July 16, 1990,²¹ followed a year later by a declaration of complete independence on August 24, 1991.²²

Ukrainian independence sparked a series of critical diplomatic developments and negotiations between the young burgeoning country and the newly renamed Russian Federation. Upon independence, Ukraine maintained custody of a significant portion of the Soviet nuclear arsenal—making it the third largest arsenal on earth at the

¹² Gardner, *Crimea, Global Rivalry*, 30–31; VOA News, "A Brief History of Crimea"; Woolf, "Here's Why Russia Won't Let Go of Crimea"; and AOWG, *Ambiguous Threats, Phase 1*, 7.

¹³ Magocsi, *History of Ukraine*, 670–672; and Subtelny, *Ukraine: A History*, 441–446, 459–460, 463–465.

¹⁴ Coyle, *Russia's Border Wars*, 28; and Goble, "Stalin Was Ready to Give Hitler Ukraine and the Baltics."

¹⁵ Magocsi, *History of Ukraine*, 699.

¹⁶ Magocsi, *History of Ukraine*, 702–703.

¹⁷ Yekelchuk, *Conflict in Ukraine*, 122–124; and Rosefielde, *Kremlin Strikes Back*, 46.

¹⁸ Magocsi, *History of Ukraine*, 702–705, 708–713.

¹⁹ Magocsi, *History of Ukraine*, 715–722.

²⁰ "Chernobyl Accident 1986."

²¹ Verkhovna Rada, "Declaration of State Sovereignty."

²² Verkhovna Rada, "Declaration of Independence."



Figure 1. Map of Crimea

time.²³ Ukraine did not, however, have operational control of the weapons, which were dependent on Russian command and control systems. Driven by global anxiety around stability and the level of control over tactical nuclear arms scattered across the former Soviet Union, Ukraine relinquished control of all the roughly three thousand inherited tactical nuclear weapons by May 1992.²⁴ While the remaining strategic nuclear arsenal was of significant concern to the international community, the Crimean Peninsula and the city of Sevastopol (home of the Black Sea Fleet) were the most significant and contentious elements in the treaty negotiations that followed.

Sour diplomatic relations persisted between Ukraine and Russia, partially fueled by Ukraine's initial claims on the Black Sea Fleet, exacerbating

domestic political pressure on Boris Yeltsin against concessions.²⁵ After surrendering its tactical nuclear weapons for dismantling in Russia, Ukraine felt it was denied its fair share of the significant financial compensation Russia received from the United States in exchange for the weapons-grade uranium extracted from the weapons. Russian politicians' expressions of territorial claims over parts of Ukraine also exacerbated diplomatic tensions and prolonged negotiations for Ukraine's strategic arsenal.²⁶ After Ukrainian president Leonid Kuchma announced that Ukraine intended to pursue a NATO Membership Action Plan (MAP) in February 1992,²⁷ the Supreme Soviet of Russia (parliament) voted in May that the 1954 gifting of Crimea to the UkSSR was illegitimate, making the peninsula an ongoing issue in negotiations.²⁸ Further complicating the situation, that same month the Crimean parliament attempted to

²³ Norris, "Soviet Nuclear Archipelago," 24–31; and Kristensen, Godsberg, and Garbose, "Ukraine Special Weapons."

²⁴ Norris, "Soviet Nuclear Archipelago," 24–31; Kristensen, Godsberg, and Garbose, "Ukraine Special Weapons"; Arbman and Thornton, *Russia's Tactical Nuclear Weapons*, 18; and Budjeryn, "Was Ukraine's Nuclear Disarmament a Blunder?" 12–13.

²⁵ Gardner, *Crimea, Global Rivalry*, 47.

²⁶ Yekelchik, *Conflict in Ukraine*, 67–68.

²⁷ Gardner, *Crimea, Global Rivalry*, 48.

²⁸ Schmemmann, "Russia Votes to Void Cession of Crimea to Ukraine."



Figure 2. The Black Sea Fleet in Sevastopol

declare independence from Ukraine and adopt a new constitution. Ukraine dismissed the actions as illegal, and the separatist constitution was replaced with one maintaining autonomy in 1995.²⁹

Another peculiar element of the Russo-Ukrainian negotiations over Crimea was how Russia situated the city of Sevastopol as a separate issue to be resolved. Ukraine had initially sought to claim the entire Black Sea Fleet (Figure 2), and driven by fear that an independent Ukraine would evict the Russian portions of the fleet from Sevastopol, another Russian parliamentary action in July 1993 declared that the port city was a part of Russia.³⁰ Part of the grounding for this claim in Russian writings is how, during the Soviet era, Sevastopol was administratively governed directly from Moscow with “republican” status, bypassing regional Crimean and Ukrainian authorities.³¹

Accompanying Ukraine’s agreement to eliminate all its remaining nuclear weapons and its accession to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) as a non-nuclear-weapon state, Ukraine, Russia, the United States, and the United Kingdom all signed the Budapest Memorandums on Security Assurances in December 1994, reaffirming the signatories “obligation to refrain from the threat or use of force against the territorial

integrity or political independence of Ukraine.”³²

This national security guarantee was a key consideration in the Ukrainian parliament’s decision to adopt the Budapest Memorandum in exchange for nuclear disarmament.³³ Nevertheless, negotiations on the final status of Crimea and Sevastopol would persist for several more years. The Crimea issue was finally settled in 1997 under two Russo-Ukrainian treaties: a Partition Treaty that divided up the Black Sea Fleet (over 82 percent of the ships went to Russia) and leased the naval base in Sevastopol to Russia for 20 years and the Treaty on Friendship, Cooperation, and Partnership between Ukraine and the Russian Federation that recognized the Ukrainian borders as-is, signed on May 31, 1997.³⁴

Ukrainian foreign relations through the late 1990s and 2000s were characterized by a balancing act between the maintenance of cordial relations with Russia and the development of economic and political ties with the West. This Westward drift included the pursuit of formal ties with NATO and the EU—in both cases, hopes of eventual membership would be hindered by endemic corruption. Against a backdrop of sociolinguistic divisions between the Ukrainian- and Russian-speaking populations, this

²⁹ Yekelchik, *Conflict in Ukraine*, 124–125; Menon and Rumer, *Conflict in Ukraine*, 27; and Gardner, *Crimea, Global Rivalry*, 46.

³⁰ Gardner, *Crimea, Global Rivalry*, 47, 51.

³¹ Kashin, “Khrushchev’s Gift,” 3, 11.

³² Budapest Memorandums; and Specter, “Russia and Ukraine Sign Friendship Treaty.”

³³ Grant, *Aggression against Ukraine*, 108, 233; and UNSC, Fiftieth Year, 3514th Meeting, 2–3.

³⁴ Partition Treaty on the Black Sea Fleet; Menon and Rumer, *Conflict in Ukraine*, 27–28; and Sorokowski, “Treaty between Ukraine and the Russian Federation,” 319–329.

tension between the West and Russia also manifested in domestic Ukrainian politics. The 2004 presidential election between pro-Western Viktor Yushchenko and Viktor Yanukovich, who favored closer ties to Moscow, brought the controversy to a boiling point. When Yanukovich's initial victory was revealed to be the result of election fraud, large popular protests against the results (now known as the Orange Revolution) led to a runoff election, with Yushchenko emerging the winner in January 2005.³⁵

With Yushchenko in power in Kyiv, Russia reacted to Ukraine's growing cooperation and partnerships with the EU by imposing economic, trade, and financial reprisals. From 2007 to late 2009, Ukraine was subjected to a series of energy disputes, financial panics, and gas shortages. This period was also characterized by a more threatening and militarily aggressive Russia. At a NATO summit in Bucharest, Putin warned that if Ukraine joined the alliance, it would risk losing Crimea and eastern Ukraine.³⁶ Later that year, in August 2008, Russia invaded Georgia, another prospective NATO member from the former Soviet bloc. Russia succeeded in securing separatist regions of Georgia, creating a frozen conflict and effectively curtailing the prospect of NATO membership. Notably, the Black Sea Fleet based in Sevastopol, Crimea, participated in the conflict, demonstrating its criticality to Russia's efforts to maintain power and influence in the region.³⁷

While Russia and Ukraine struck an oil transit deal to end the energy disputes,³⁸ earlier austerity measures the Yushchenko government had imposed to manage the economic damage were widely unpopular, contributing to Yanukovich's electoral victory in 2010. The Yanukovich administration withdrew Ukraine's intent to pursue NATO membership, as

well as cultural measures favoring the Ukrainian language over Russian. In the most controversial action, Yanukovich and his party extended Russia's soon-to-expire lease of the port in Sevastopol to 2042 in exchange for energy discounts, sparking protests. But despite these improved relations with Moscow, the Yanukovich government continued to pursue Ukraine's economic partnerships with the EU, a tension that would come to a head several years later during Euromaidan (see Figure 3 for a summary time line of historical events of significance leading up to the crisis in Crimea).

Pre-Crisis: Russian Compulsion and Euromaidan

Culminating years of growing economic integration among post-Soviet Eurasian states, Russia, Belarus, and Kazakhstan signed a compact in November 2011 that laid the groundwork for the Eurasian Economic Union (EAEU), announcing hopes of full establishment (with Russia as the dominant member) by 2015. After the compact was signed by Russian president Dmitry Medvedev, Vladimir Putin (then prime minister) took an active role in promoting the EAEU.³⁹ Putin lifted up Eurasian integration as a flagship initiative of his third term as president starting in 2012, with plans for the EAEU and associated institutions to serve as geopolitical and economic counterweights against EU influence.⁴⁰

Nevertheless, the Ukrainian government of president Yanukovich persisted in pursuing an association agreement (AA) with the EU, only seeking observer status in the EAEU.⁴¹ By 2013, Yanukovich had consolidated significant political and economic power, having prosecuted political rivals⁴² and built a powerful oligarchic network around himself.

³⁵ Conley, "Orange Revolution."

³⁶ Zygar, *All the Kremlin's Men*, 275–276.

³⁷ Yekelchik, *Conflict in Ukraine*, 128.

³⁸ Yekelchik, *Conflict in Ukraine*, 128; and Medetsky, "Deal Struck on Gas, Black Sea Fleet."

³⁹ "Russia, Belarus, Kazakhstan Sign Pact."

⁴⁰ Menon and Rumer, *Conflict in Ukraine*, 63.

⁴¹ Menon and Rumer, *Conflict in Ukraine*, 64; and "Ukraine Seeking Observer Status."

⁴² US Department of State, "Statement of Concern about Tymoshenko."



Although Ukraine surrendered its inherited nuclear weapons and received formal security assurances, its peace with Russia was progressively threatened after the USSR collapsed. Ukraine sought to balance Russian ties with Western economic integration—viewed by Moscow as a violation of its sphere of influence and a threat to EAEU success. Threats and measures against Ukraine led Yanukovych to reject EU association, triggering Euromaidan and his removal from office. Russia responded by invading Crimea.

Figure 3. Selected Russian–Ukrainian Interactions, 1954–2014

This network valued a balance of access to cheap Russian energy and thriving Western markets.⁴³ Russia, however, viewed the AA as a threat to its core interests—not only did it undermine the EAEU, but it also had implications for Russian access to the Ukrainian market and was politically perceived as pulling Ukraine permanently out of the Russian sphere of influence.⁴⁴

With Ukraine scheduled to sign the AA at the November 28–29, 2013, Vilnius Summit, Russia began an aggressive economic and diplomatic push to prevent Eastern Partnership countries from association with the EU using both carrots and sticks. By September 2013, Russia had successfully pivoted Armenia away from the EU and toward the Eurasian Customs Union by threatening to raise natural gas prices and offering financial and security incentives.⁴⁵ Similarly, Russia imposed trade restrictions on Ukrainian goods with explicit threats of economic escalation.⁴⁶ In September, having already imposed trade restrictions, Putin adviser Sergei Glazyev openly threatened Ukraine at a conference in Yalta, implying that Russia would force Ukraine to default on its debts:

Ukrainian authorities make a huge mistake if they think that the Russian reaction will become neutral in a few years from now. This will not happen. . . . Russia is the main creditor of Ukraine. Only with customs union with Russia can Ukraine balance its trade. . . . We don't want to use any kind of blackmail. This is a question for the Ukrainian people. . . . But legally, signing this agreement about association with EU, the Ukrainian government violates the treaty on strategic partnership and friendship

with Russia. . . . Signing this treaty will lead to political and social unrest. . . . The living standard will decline dramatically . . . there will be chaos.⁴⁷

As a carrot, Russia simultaneously offered Ukraine a fifteen-billion-dollar loan if Ukraine would turn away from the EU and toward the EAEU. Yanukovich flew to Moscow three times in October and early November for talks with Putin leading up to the scheduled signing. Putin also leveraged European calls for the release of Yanukovich's jailed political rivals to imply that the EU wanted to see Yanukovich overthrown.⁴⁸ Finally, on November 21, 2013, one week before Ukraine was scheduled to sign the AA at Vilnius, the Ukrainian prime minister Mykola Azarov announced that preparations to sign the AA had ceased in order to “ensure the national security of Ukraine.”⁴⁹ Simultaneously, the Ukrainian government announced its proposal of a three-way trade commission among Ukraine, the EU, and Russia (which the EU would subsequently refuse). Meanwhile, Putin reiterated that signing would lead to protective economic measures against Ukraine but insisted that Russia was “not against Ukraine's sovereign choice whatever it may be.”⁵⁰

At the Vilnius summit on November 28, after refusing to sign the AA, Yanukovich spoke with German president Angela Merkel and Lithuanian president Dalia Grybauskaitė, and in a video he was overheard saying, “I'd like you to listen to me. For three and a half years I've been alone. I've been face-to-face with a very strong Russia on a very unlevel playing field.”⁵¹ The decision immediately sparked

⁴³ D'Anieri, *Ukraine and Russia*, 182, 184, 191, 197, 199.

⁴⁴ D'Anieri, *Ukraine and Russia*, 210.

⁴⁵ “Effects of Armenia's Decision.”

⁴⁶ Soldatkin and Polityuk, “Russia Tightens Customs Rules.”

⁴⁷ D'Anieri, *Ukraine and Russia*, 202–203; and Walker, “Ukraine's EU Trade Deal.”

⁴⁸ Zygar, *All the Kremlin's Men*, 258–259.

⁴⁹ D'Anieri, *Ukraine and Russia*, 207.

⁵⁰ “Ukraine Drops EU Plans and Looks to Russia.”

⁵¹ Zygar, *All the Kremlin's Men*, 260.



Figure 4. Euromaidan in Independence Square, Kyiv

protests in Kyiv's Independence Square,⁵² which continued to escalate into a months-long saga of persistent demonstrations, protest camps, barricades, clashes with riot police, occupied government buildings, anti-protest laws, violence, and negotiations with opposition leaders—collectively known as Euromaidan.⁵³

During the earliest days of Euromaidan leading up to the Vilnius summit and into January 2014, EU officials and national leaders expressed support for the protests, warned against any violent suppression, and praised the growth of pro-EU sentiment in Ukraine, including hopes that Yanukovych would reverse his decision.⁵⁴ As protests continued, on December 17, Yanukovych and Putin signed

the Ukrainian-Russian Action Plan, under which Russia would bolster the Yanukovych government by purchasing fifteen billion dollars in Ukrainian bonds, cut the price of natural gas by a third, and restore customs practices to the status quo before Russia's pressure campaign, with Yanukovych citing the importance of developing cross-border and interregional cooperation with Russia.⁵⁵ Despite Moscow's aid to Ukraine, Euromaidan grew through January and February.

The goals of the United States, meanwhile, were the end of violent suppression of protesters, the facilitation of new elections, and the resumption of Ukrainian integration with the EU. Days away from the culmination of the Euromaidan crisis, President Barack Obama condemned the violence against protesters and imposed visa bans on twenty senior Ukrainian officials, threatening more to come.⁵⁶ Speaking at a news conference, President Obama said he had "urged the military in Ukraine

⁵² "Low Expectations at the Eastern Partnership Summit."

⁵³ The label for the political movement, *Euromaidan*, pairs *Euro* with the Ukrainian word for *square*, in reference to Kyiv's Independence Square, which served as the epicenter for protests. See Figure 4.

⁵⁴ "EU's Füle Rues Ukraine's 'Missed Chance'"; "Key MEPs Warn Ukraine Authorities"; "EU Diplomats Go to Demo Site in Kyiv"; "EP President Hopes Yanukovych Will Start Listening to Maidan Voices"; and "EuroMaidan Is the Largest Demonstration in EU History."

⁵⁵ "Russia Offers Ukraine Major Economic Assistance"; "Eased Russian Customs Rules"; and "Cross-Border and Inter-Regional Cooperation."

⁵⁶ Castle and Gordon, "U.S. Imposes Visa Ban."

to show restraint,” hoped for “progress towards a multiparty technical government that can . . . adopt reforms necessary for free and fair elections next year,” and called for the respect of basic human freedoms, saying “the people obviously have a very different view and vision for their country.”⁵⁷

Russia’s primary goal through the Euromaidan crisis was to preserve and stabilize the rule of the client Yanukovych regime, while also incentivizing the regime to stay the course in reorientation toward Russia. On the same day as President Obama’s sanctions and statements against the Yanukovych government, the Russian Foreign Ministry issued a statement requesting “the leaders of the ‘Maidan’ to stop the bloodshed in their country, and immediately renew their dialogue with the legal authorities without the use of threats and ultimatums” and going on to say, “Ukraine is a friendly and fraternal state for Russia, its strategic partner, and we will use all our influence to help this country live calmly and in peace.”⁵⁸

The next day, on February 20, Russian prime minister Medvedev stated that Moscow could only cooperate fully with Ukraine if its leadership was in “good shape” and that Russia would not hand over cash to a leadership who let opponents walk over it “like a doormat” (Yanukovych was in the midst of negotiations with opposition leaders at the time).⁵⁹ Despite Russia’s efforts, Yanukovych finally signed a compromise with opposition leaders and fled the country for Russia the night of February 21, and the Verkhovna Rada (Ukrainian parliament) voted to impeach him on February 22. The moment it became clear that the Yanukovych government would not survive Euromaidan was when Russia initiated the invasion and occupation of Ukraine on the Crimean Peninsula and the nuclear crisis began.

The Crisis: Invasion and Annexation of Crimea

Leading up to Russia’s decision to invade Crimea, while the attention of the world was fixed on Kyiv, there was a series of escalating political signals and threats concerning the fate of the peninsula should the Yanukovych regime be removed. These took the form of political pressure and official actions of Russian officials, actions and demonstrations of Russian nongovernmental organizations (NGOs) in Crimea, and the mobilization of armed opposition and paramilitary groups.⁶⁰

Even before Euromaidan, the autonomous Verkhovna Rada of Crimea (Supreme Council of Crimea) expressed opposition to association with the EU, and Russian NGOs in Crimea began advocating for the peninsula to hold a revised legal status relative to Ukraine and Russia. In response to Euromaidan, the Supreme Council expressed its support for the Yanukovych government, urging him to declare a state of emergency, and pro-Russian groups staged rallies in Simferopol supporting Ukrainian entry into the Eurasian Customs Union.⁶¹ However, Crimean support for Russia was not unanimous. The Muslim Crimean Tatar population and leadership opposed Russian activities on the peninsula, favored continued unity with Ukraine and association with the EU, and persistently protested and warned that Russia would annex the region—opposition that would later see the Crimean Tatar community oppressed under Russian occupation.⁶²

As Euromaidan progressed, signals and measures around Crimea increased. These included public discussion of separatism and secession by local

⁵⁷ Obama, “President’s News Conference.”

⁵⁸ Ministry of Foreign Affairs, “Statement by the Russian Ministry of Affairs.”

⁵⁹ “Ukraine Leadership Must Be in ‘Good Shape.’”

⁶⁰ AOWG, *Ambiguous Threats*, Phase 1, 50–55.

⁶¹ AOWG, *Ambiguous Threats*, Phase 1, 50; and “Ukraine Unrest.”

⁶² US Department of State, *Ukraine 2018 Human Rights Report*, 57–78; Klymenko, *Human Rights Abuses*; and *Situation of Human Rights*.

officials and Russian television broadcasts, meetings between local and Russian officials, the distribution of Russian passports, the spread of claims that a new government in Kyiv would threaten ethnic-Russian populations and restrict use of the Russian language (some Russian NGOs even citing the threat of “genocide”), the mobilization of “self-defense units” and Cossacks to patrol streets and erect checkpoints, and official deliberation and actions of local officials toward separatism and appeals to Russia.⁶³

Although Russia clearly made preparations for a potential invasion and annexation, its decision to invade Crimea was directly responsive to the fall of the Yanukovych government. Recounting the events in a 2015 propaganda film, Putin said that on February 23 (one day after Yanukovych was officially removed from office) he “was speaking with colleagues and said, ‘Frankly, this is our historical territory and Russian people live there, they were in danger, and we cannot abandon them.’ . . . We never thought about severing Crimea from Ukraine until the moment that these events began, the government overthrow.”⁶⁴ However, the Kremlin has alternatively said that the course of action was broached in December 2013, when the head of the Supreme Council of Crimea visited Moscow and said that, should Yanukovych fall, Crimea would be prepared “to join Russia.”⁶⁵

On February 22, the same day Yanukovych was officially removed from office, Spetsnaz of the Main Intelligence Directorate (GRU) were sent to Crimea to secure strategic Russian facilities. The next day, Russia announced new embargoes against food from Ukraine, but the military apparatus was also put in motion. Convoys of Russian military vehicles began approaching Crimea through the Russian city of Novorossiysk, the Russian 45th Airborne Special

Forces and six Mi-8 helicopters were airlifted into Anapa near Crimea, and additional strategic airlift Il-76 aircraft were redeployed to the city. Russian armored personnel carriers also moved out from the base into the city, and pro-Russian protests in Sevastopol asserted that they had elected a new city leader—Russian citizen Aleksei Chaly. Russian members of parliament later arrived to offer Russian citizenship and passports, promising that should Crimea ask to join Russia, it would be addressed swiftly. On February 25, the Black Sea Fleet was put on alert, Russian troops arrived in the Crimean city of Yalta, and Gazprom announced it might increase gas prices for Ukraine.⁶⁶

On February 26, while Russian foreign minister Sergei Lavrov reiterated a position of “principled non-intervention” in Ukraine,⁶⁷ Putin ordered snap military exercises in western Russia, and a landing ship of the Russian Black Sea Fleet arrived in Sevastopol carrying two hundred special operations forces. On February 27, the border between mainland Ukraine and the Crimean Peninsula was blocked by checkpoints, and fifty Russian special operators disguised as local self-defense forces took control of the Supreme Council of Crimea and other administrative buildings in Simferopol, erecting Russian flags above the buildings. Under armed occupation, the Crimean regional government was dissolved and reformed and passed a measure approving a referendum on the status of Crimea seeking greater autonomy from Ukraine. The ports in Sevastopol were blockaded, with Ukrainian Navy and Coast Guard vessels surrounded. Russian fighter jets were put on

⁶³ AOWG, *Ambiguous Threats*, Phase 1, 50–55.

⁶⁴ MacFarquhar, “Putin Says He Weighed Nuclear Alert over Crimea.”

⁶⁵ Zygat, *All the Kremlin's Men*, 275.

⁶⁶ Interfax-Ukraine, “Rosselkhoznadzor: Russia Could Limit Food Imports”; Editor, “Ukraine Liveblog: Day 7”; Amos, “Ukraine Crisis Fuels Secession Calls”; Huzar, “Rosja przygotowuje się do zbrojnej interwencji na Ukrainie?” [Russia is preparing for military intervention in Ukraine?]; Clements, “Russian Military Intervention in Ukraine”; Kofman et al., *Lessons from Russia's Operations*, 6–12; and AOWG, *Ambiguous Threats*, Phase 1, 55–56.

⁶⁷ Clements, “Russian Military Intervention in Ukraine.”



Figure 5. Unmarked Soldiers Occupy Key Sites in Simferopol

standby. Later that night, unmarked special operators surrounded Belbek air base, and convoys of Russian transport and attack helicopters moved into Ukrainian airspace over Crimea the next morning. The new Ukrainian government officially summonsed Russia's diplomatic representation to explain the military movements, but responses were delayed. Major troop landings and movements between Sevastopol and Simferopol continued through February 28, including the seizure of Simferopol Airport (Figure 5, left), which in turn facilitated the insertion of more Russian forces.⁶⁸

On February 28, in response to these developments, President Obama issued a statement saying the United States was "deeply concerned by reports of military movements taken by the Russian Federation inside of Ukraine," adding that "any violation of Ukraine's sovereignty and territorial integrity would be deeply destabilizing" and "a clear violation of Russia's commitment to respect the independence and sovereignty and borders of Ukraine, and of international laws."⁶⁹ US secretary of state

John Kerry also condemned Russia's "incredible act of aggression" and threatened sanctions on March 2, saying, "You just don't in the 21st century behave in 19th century fashion by invading another country on completely trumped up pre-text."⁷⁰ On March 1, EU's high representative for foreign affairs and security Catherine Ashton announced that the EU "deplores" Russia's decision to use military force in Ukraine, saying it was an "unwarranted escalation of tensions" and calling "all sides to decrease the tensions immediately through dialogue, in full respect of Ukrainian and international law." Ashton added, "The unity, sovereignty and territorial integrity of Ukraine must be respected at all times and by all sides. Any violation of these principles is unacceptable. More than ever, restraint and sense of responsibility are needed."⁷¹

On March 1, the Federal Assembly of Russia approved Putin's request to use force in Ukraine to protect Russian interests, allowing for Russian forces to be utilized until the political situation in Ukraine normalized. That same day, Russian forces erected roadblocks and began digging trenches at the border with mainland Ukraine near Armyansk, secured control of the Kerch ferry port on the

⁶⁸ Higgins and Myers, "Putin Orders Drills in Crimea"; Watts and Stewart, "Ukraine 'Invaded'"; "Crimean Parliament Sacks Regional Government"; "Ukraine Crisis: Russian Helicopters Seen"; Kofman et al., *Lessons from Russia's Operations*, 6–12; and AOWG, *Ambiguous Threats, Phase 1*, 57–58.

⁶⁹ Obama, "Statement on Ukraine."

⁷⁰ Dunham, "Kerry Condemns."

⁷¹ Ashton, "Statement by EU High Representative."



Figure 6. Mixed Use of Military and Civilians

Ukrainian side of the Kerch Strait, and in Feodosiya besieged a Ukrainian base and blockaded the port with a Russian warship. On March 2, more Russian forces and vehicles traveled from Sevastopol to Simferopol, and Russian forces posted guards at the gates of a Ukrainian army base in Perevalne. Meanwhile the Federal Assembly began debating a law that would oblige the government to consider the annexation of any adjacent and predominantly Russian region that votes to join the country, and in a phone call with President Obama, Putin denied that Russia had used any force in Ukraine but said that if force were used, it would be a response to provocations by Ukraine.⁷²

On March 3 the blockade and besieging of Ukrainian army and naval forces on the Crimean Peninsula escalated as Russian forces presented an ultimatum: denounce the new government in Kyiv and swear allegiance to the new Crimean government or be forced to submit. Russia denied the reports, and the Russian envoy to the United Nations (UN) claimed that Yanukovych (at the time still recognized by Russia as president of Ukraine) asked Putin in writing for the use of force in Ukraine. Russian ships and flagged tugboats continued to box in Ukrainian naval forces on the

peninsula, and armed Russian troops took up posts outside Ukrainian bases in Sevastopol and Simferopol. The influx of Russian military hardware into the peninsula continued with the arrival of ten combat helicopters and ten strategic lift aircraft. Meanwhile pro-Russian demonstrators in eastern mainland Ukraine began occupying government buildings in protest of the new pro-Western administration in Kyiv, and Putin announced that he had allegedly ordered Russian forces exercising near the Ukrainian border to return to base.⁷³

As the immobilization of Ukrainian forces continued and mobile phone service in areas of the country was disrupted, Putin denied on March 4 that the forces besieging Ukrainian troops in Crimea were Russian, instead identifying them as local self-defense forces. Russia's ambassador to the UN displayed a photocopied letter allegedly signed by former president Yanukovych the same day, telling reporters it justified the movement of Russian forces into the peninsula.⁷⁴ On March 6, the Supreme Council of Crimea, under new

⁷² Booth and Englund, "Tensions Rise in Crimea"; Kofman et al., *Lessons from Russia's Operations*, 7–9; and AOWG, *Ambiguous Threats*, Phase 1, 58.

⁷³ "Yanukovych 'Asked Russia for Troops'"; "US, Britain, EU Warn against Russian War"; Resneck and Hjelmgaard, "Both Sides Defiant"; Kofman et al., *Lessons from Russia's Operations*, 7–9; and AOWG, *Ambiguous Threats*, Phase 1, 59.

⁷⁴ Erlanger, "Ukraine Rushes to Dampen Secessionist Mood in East"; O'Malley, "Kremlin 'Invited to Invade'"; "West Struggles for Any Traction over Ukraine"; and AOWG, *Ambiguous Threats*, Phase 1, 59.

leadership, accelerated the time frame for the referendum on the status of Crimea and changed the question: rather than voting on greater autonomy from Ukraine, residents of Crimea would vote on accession to the Russian Federation,⁷⁵ despite members of the body being barred from entering to participate in the vote.⁷⁶ Russian lawmakers responded to the vote with promises to receive Crimea if the peninsula voted to leave in the referendum, as Russian military hardware continued to flow into the region and the first public ceremony swore in once-Ukrainian military personnel as members of the “Military Forces of the Autonomous Republic of Crimea.”⁷⁷ The sealing off of Ukrainian forces also continued, including the mixed use of soldiers and civilians (Figure 6) armed with sticks and clubs to set up machine gun posts along a Ukrainian army landing strip in Saki,⁷⁸ and the last military airstrip on the peninsula was under Russian control soon after, on March 9. That same day, Russian forces crossed into portions of mainland Ukraine adjacent to Crimea to set up minefields across the narrow corridor connecting the peninsula to the mainland. Ukrainian anti-aircraft forces in Yevpatoria were surrounded and ordered to surrender or face attack,⁷⁹ and Russian troops captured a missile depot in Chornomorske.⁸⁰

The Supreme Council of Crimea declared the peninsula’s independence from Ukraine on March 11, as the Russian Foreign Ministry pointed to the secession of Kosovo from Serbia as legitimizing precedent for the impending referendum. Three days before the referendum, the Russian Defense Ministry announced that exercises involving thousands of troops in several regions bordering Ukraine would continue through the end of

March, and even though the US House of Representatives had passed a resolution condemning Russia, the United States refrained from granting requests for military aid from the new government in Kyiv. Violence between demonstrators in Crimea continued leading up to the referendum, talks between Kerry and Lavrov two days prior ended in a stalemate, and on the eve of the vote Russia vetoed a draft resolution at the UN Security Council that would have declared the referendum invalid. Despite international condemnation, the referendum took place on March 16 and affirmed the separation of Crimea from Ukraine in order for Crimea to join Russia.⁸¹

The day after the referendum, Russia recognized Crimea as a sovereign state, and Crimean officials issued an appeal to be admitted into the Russian Federation with the status of a republic. An initial reunification treaty was signed the next day on March 18. Soldiers and demonstrators then stormed Ukrainian military bases across Crimea, including Ukraine’s naval headquarters in Sevastopol, killing an officer and arresting a Ukrainian admiral. Ukraine authorized soldiers to use their weapons defensively in response but later announced the withdrawal of its troops from the peninsula and the country’s withdrawal from the Commonwealth of Independent States.⁸² At this juncture in the crisis, EU Parliament president Martin Schulz described war as “a genuine possibility,” saying that “something has changed” and that “some people thought that war and the risk of war was no longer a topic for discussion . . . but if we look at events, we are talking about the risk of armed conflict”⁸³ (see Figure 7 for a summary time line of events through the invasion and annexation of Crimea).

⁷⁵ Sullivan and Karmanau, “Crimea Referendum Vote.”

⁷⁶ “There Was No Quorum.”

⁷⁷ Karmanau and Bennett, “Russia Reinforces Military Presence”; and “Timeline: Key Events in Ukraine.”

⁷⁸ Binns, “Army Airport Seized.”

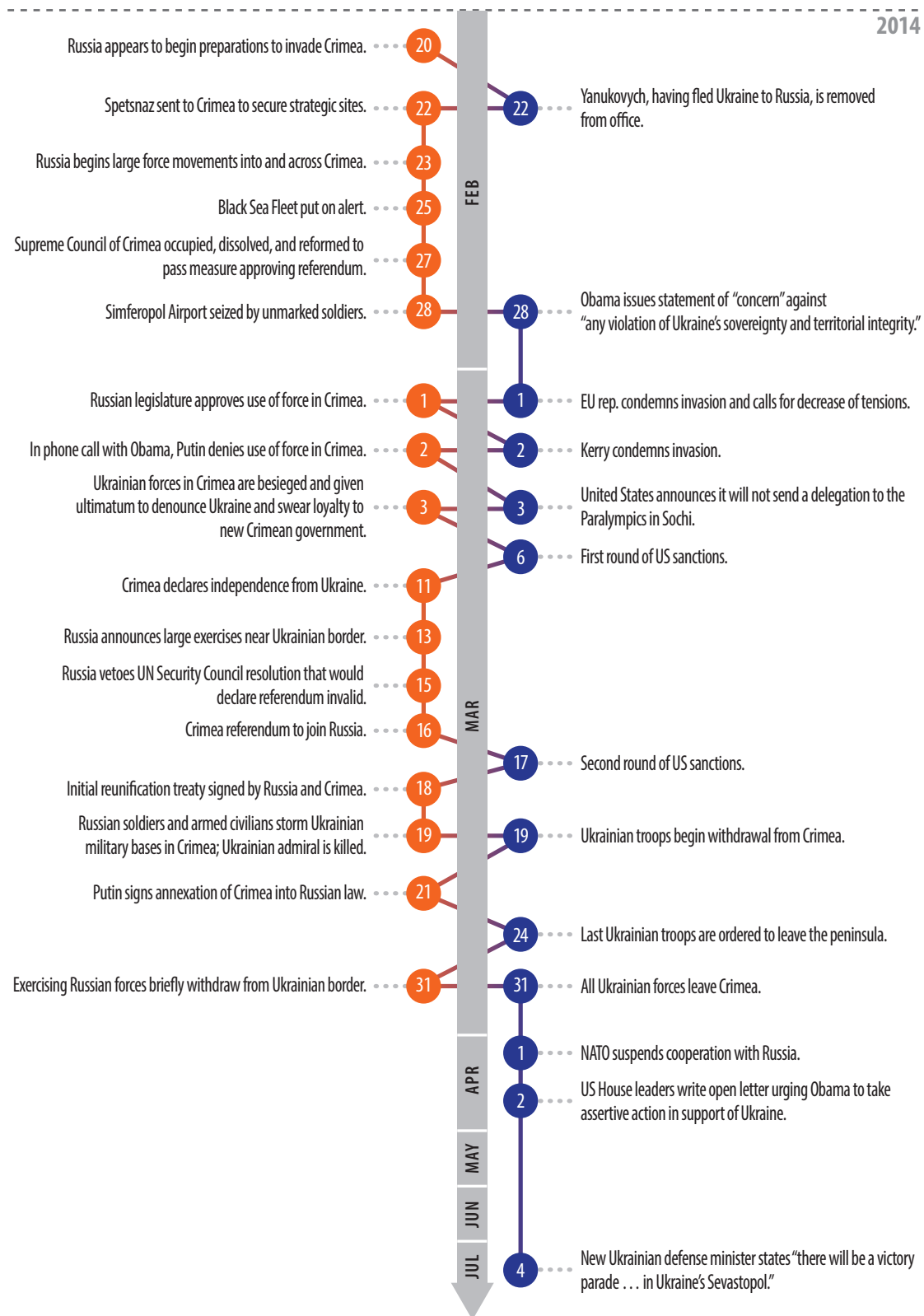
⁷⁹ Chu and Loiko, “Ukraine Leaders Vow Not to Cede Land.”

⁸⁰ Kofman et al., *Lessons from Russia’s Operations*, 7.

⁸¹ “Ukraine Crisis Timeline”; and Herszenhorn, “Crimea Votes to Secede.”

⁸² Oliphant, Waterfield, and Foster, “Russia Risks New Cold War”; “Ukraine Crisis Timeline”; and McPhedran, “Russia Takes Charge of Crimea’s Military Bases and Officers.”

⁸³ AFP, “Ukraine Crisis Returns Specter of War.”



Russia progressively changed the situation on the ground in Crimea without major interruption. It immobilized Ukrainian forces leading up to the referendum, after which Russian actions against remaining Ukrainian forces became violent. At times the international community lagged in conclusively identifying forces seizing Crimean facilities, so Russian action does not assume assured knowledge and attribution at the time.

Figure 7. Invasion and Annexation Time Line

Resolution

On March 21, Putin signed the annexation of Crimea into Russian law. The seizure of all Ukrainian military installations on the peninsula concluded over the next two days as Russian forces massed along Ukraine's northeastern border. Finally, the last Ukrainian military personnel were ordered off the peninsula on March 24.⁸⁴ On March 31, soon after a brief removal of some Russian forces from the border region of Rostov at the urging of the United States, Russia initiated the invasion of the Donbass region of eastern Ukraine.⁸⁵ However, the annexation and removal of Ukrainian forces was not the end of the Crimea crisis. As recounted in the analysis below, there followed a series of nuclear posturing and threats explicitly concerning Crimea, and, despite being concurrent with the invasion of Donbass, the crisis in Crimea was treated as separate from that in Donbass in high-level negotiations.⁸⁶ Resolution of the crisis, then, is best dated as June 1, 2015, after which nuclear posturing and threats around Crimea appeared to cease (see below).

Russia's objective was to secure the Crimean Peninsula in order to ensure strategic access, allegedly to protect Russian-speaking populations and to prevent integration of Ukraine into NATO.⁸⁷ Russia succeeded in securing de facto control of Crimea and ostensibly succeeded in insulating Russian-speaking residents of Crimea from alleged Ukrainian nationalist reprisals. The prospect of Ukrainian integration into NATO also did not materialize in the years since the crisis. While there were indications that Russian actions in Donbass alongside the crisis in Crimea sought to connect separatist regions in eastern Ukraine to

the peninsula as a new region ("Novorossiia"),⁸⁸ this analysis does not consider that effort to be an objective of the initial invasion of Crimea, which was responsive to the removal of Viktor Yanukovich. In summary, Russia emerged from the crisis in Crimea as the victor.

Ukraine, the EU, and the United States, on the other hand, once faced with the invasion of Crimea, sought to de-escalate tensions and avoid an armed conflict while ensuring the territorial integrity of Ukraine through negotiations and sanctions. The negotiations and sanctions failed to maintain Ukraine's territorial integrity or de-escalate the crisis—Russia secured de facto military and administrative control of Ukraine's Crimean Peninsula, and armed conflict would nevertheless come to be imposed on Ukraine in Donbass.

Evaluation and Analysis

The annexation of Crimea was a high-stakes military and political confrontation, beginning with an earliest initiation of February 20, 2014,⁸⁹ and continuing beyond the final removal of Ukrainian forces from the peninsula on March 31, 2014.⁹⁰ The specter of nuclear weapons hung over the crisis from the very beginning and continued months after Russia had fully occupied the region—due to not only Russian rhetoric but also Ukraine's previous surrendering of its nuclear weapons in exchange for international guarantees of territorial integrity that were nevertheless violated.⁹¹ For the sake of this analysis, the end date of the Crimea crisis is considered to be June 1, 2015, marking the last explicit and open international back-and-forth concerning nuclear weapons and the Crimean

⁸⁴ "Vladimir Putin Signs Russia's Annexation"; AOWG, *Ambiguous Threats, Phase 1*, 62; and "Ukraine Crisis Timeline."

⁸⁵ Brecher et al., "Crimea-Donbass," 2.

⁸⁶ Hoyle, "Putin Threat of Nuclear Showdown."

⁸⁷ Zygars, *All the Kremlin's Men*, 152–154; and Tayler, "Putin's Nuclear Option."

⁸⁸ Menon and Rumer, *Conflict in Ukraine*, 85.

⁸⁹ Galleotti, *Armies of Russia's War in Ukraine*, 7.

⁹⁰ Brecher et al., "Crimea-Donbass," 2.

⁹¹ Koren, "Ukraine Crisis Is Unsettling Decades-Old Nuclear-Weapons Agreements," 68.

Peninsula.⁹² A legal analysis of the crises concluded that there was no formal threat to use nuclear weapons but recognized that Russia had “invoked its nuclear weapons repeatedly since March 2014,” causing significant concern among observers.⁹³

The evaluation and analysis of the Crimea crisis below will first present a detailed examination of what roles nuclear weapons played in the progression and outcome of the crisis, followed by an assessment of which characteristics of nuclear weapons were influential in their roles in the crisis. With reference to the progression of facts on the ground, the nuclear elements of the crisis are here presented in a separate but chronological narrative to more clearly isolate and analyze the roles of nuclear weapons in the crisis. Finally, a summary of US deliberations around the crisis and the extent of US responses is presented to show that, while more extensive military action was debated, the United States decided not to act militarily against Russian actions and resolve.

Nuclear Weapons in the Crisis

Before the onset of Euromaidan and the crisis in Crimea, Russian military doctrine since 2000 allowed for a first-use nuclear response “to large-scale aggression utilizing conventional weapons in situations critical to the national security of the Russian Federation.”⁹⁴ Leading up to the crisis, Russia increased the role of nuclear concepts and capabilities in its security strategy, including threats and potential limited use in an otherwise conventional conflict.⁹⁵ Russia ascribes special importance to its nonstrategic arsenal as an offset to superior NATO and US conventional forces, as well as an avenue that “helps Moscow keep overall

nuclear parity with the combined nuclear forces of the United States, Britain, and France.”⁹⁶ By 2014, Russia maintained about 2,000 nonstrategic warheads, compared to 180 nonstrategic bombs maintained in theater by the United States.⁹⁷

Speaking in an interview for a state-sponsored 2015 documentary celebrating the annexation, Putin identified the morning of February 23, 2014, as the moment when he gave the order for deputies to plan the annexation of Crimea. According to Putin’s account, his concerns of a Western military intervention led him to consider putting Russia’s nuclear weapons on alert that morning. While he eventually decided against the alert as unnecessary, Putin said he was prepared to confront “the worst possible turn of events.”⁹⁸ “We were ready to do it,” Putin said, adding “I don’t think this was actually anyone’s wish—to turn it into a world conflict.”⁹⁹

The Russian state alluded to nuclear force, including explicit references to the United States, at key moments during the crisis (see Figure 8 for a summary time line of nuclear statements and threats concurrent with the crisis and related to Crimea). Concurrent with the Crimean referendum in mid-March, prominent Russian commentator Dmitry Kiselyov on the state-owned Russia-1 network did a segment titled “Into Radioactive Ashes” where, with a graphic of a mushroom cloud displayed behind him, he criticized those denouncing Russia’s seizure of Crimea and described Russia as “the only country in the world capable of turning the USA into radioactive

⁹² Keck, “Russia Threatens to Deploy Nuclear Weapons.”

⁹³ Grant, *Aggression against Ukraine*, 165; and “Gorbachev Issues New Warning.”

⁹⁴ Ball, “Escalate to De-Escalate.”

⁹⁵ Schneider, “Escalate to De-escalate.”

⁹⁶ Kristensen and Korda, “Russian Nuclear Forces, 2019,” 79–80.

⁹⁷ Kristensen and Norris, “Worldwide Deployments of Nuclear Weapons, 2014”; and Kristensen and Norris, “Russian Nuclear Forces, 2014.”

⁹⁸ MacFarquhar, “Putin Says He Weighed Nuclear Alert over Crimea.”

⁹⁹ Smith-Spark, Eshchenko, and Burrows, “Russia Was Ready to Put Nuclear Forces on Alert.”

dust.”¹⁰⁰ Later that March, after military actions on the peninsula peaked in aggression, Russian forces held a large, preplanned three-day nuclear exercise that reportedly included ten thousand soldiers, thirty military units, and one thousand pieces of equipment.¹⁰¹

Ukraine also made allusions to nuclear weapons in the midst of the invasion in mid-March, days before the referendum. Most notably, acting president of Ukraine Oleksandr Turchynov wrote a March 11 column in the *New York Times*—“Kiev’s Message to Moscow”—in which he alluded to guarantees made by the international community in exchange for nuclear disarmament after the collapse of the Soviet Union and the implications for nuclear nonproliferation efforts in the future if Russian actions in Crimea succeeded. “In 1994, Ukraine surrendered its nuclear weapons in exchange for security guarantees from the United States, Russia and Britain, and for their pledge to respect its sovereignty and territorial integrity,” wrote Turchynov.¹⁰² “If this agreement is violated, it may lead to nuclear proliferation around the world. The rule of law and the credibility of international institutions would also be severely undermined as deterrents to military aggression.”¹⁰³

Ukrainian legislator Pavlo Rizanenko made similar comments to *USA Today* one day prior, saying that the United States, Great Britain, and Russia had agreed “to assure Ukraine’s territorial integrity” and that Ukraine “gave up nuclear weapons because of this agreement. . . . Now there’s a strong sentiment in Ukraine that we made a big mistake.”¹⁰⁴ Rizanenko specifically referred to hopes that the United States would prevent Russian violations, saying that “everyone had this sentiment that for

good or bad the United States would be the world police. . . . Now that function has been abandoned by President Obama and because of that Russia invaded Crimea.”¹⁰⁵

Russia continued to invoke its nuclear arsenal after the annexation of Crimea. While it is important to note that references to nuclear weapons after April 6 overlap with the parallel crisis in eastern Ukraine,¹⁰⁶ many of the invocations made explicit reference to Crimea. While it is impossible to isolate these instances from the Donbass crisis, they nevertheless occur within the context of an effort to deter any Ukrainian, US, or NATO efforts to militarily reverse the situation in Crimea.

In early May 2014, both Russia and the United States conducted previously scheduled nuclear exercises. Russia’s exercise involved “all branches of the armed forces across the country,” according to Putin, including strategic bomber aircraft, both Pacific and Northern fleet underwater missile carriers, “strategic land-based mobile missile systems,” and both the Southern and Central military district missile corps.¹⁰⁷ Demonstrations, according to state-owned Russian press reports, included “a successful interception of a ballistic target by a short-range countermissile” as well as air-to-ground cruise missile strikes¹⁰⁸ (which were performed with nuclear-capable AS-15 Kent missiles).¹⁰⁹ The US Strategic Command (USSTRATCOM) exercise Global Lightning 14 took place from May 12 to 16 and included “approximately 10 B-52 Stratofortresses and up to six B-2 Spirit bombers to demonstrate flexibility and responsiveness in the training scenarios throughout the continental U.S.”¹¹⁰ Observers reported that Global Lightning

¹⁰⁰ Jackson, “Russia Can Turn U.S. ‘into Radioactive Dust’”; “Russia Could Turn USA into Radioactive Ashes.”

¹⁰¹ Jivanda, “Russia Carries out Massive Nuclear War Exercise.”

¹⁰² Turchynov, “Kiev’s Message to Moscow.”

¹⁰³ Turchynov, “Kiev’s Message to Moscow.”

¹⁰⁴ Dorell, “Ukraine May Have to Go Nuclear.”

¹⁰⁵ Dorell, “Ukraine May Have to Go Nuclear.”

¹⁰⁶ “Ukraine Crisis Timeline.”

¹⁰⁷ Nikolsky, “Russia Holds Military Drills.”

¹⁰⁸ Nikolsky, “Russia Holds Military Drills.”

¹⁰⁹ Kristensen, “Nuclear Exercises Amidst Ukrainian Crisis.”

¹¹⁰ USSTRATCOM Public Affairs, “Global Lightning 14.”

exercises typically included the participation of ballistic missile submarines, albeit without live-fire demonstrations.¹¹¹

Putin noted that the Russian exercises had been announced as early as November 2013.¹¹² The Russian nuclear exercise in March was also previously scheduled.¹¹³ USSTRATCOM likewise insisted that Global Lightning 14 was “planned for more than a year” and that its timing was “unrelated to real-world events.”¹¹⁴ Little about the exercises was out of the ordinary, and observers have disagreed on whether or not to link the exercises to the Ukraine crises, so this analysis does not consider them to be overt posturing responsive to the crisis in Crimea. Nevertheless, within the context of the crisis, the contrast between how Russia and USSTRATCOM presented their exercises is notable. USSTRATCOM’s Global Lightning 14 took place with little fanfare—just one short press release—and no live test launches took place. Russia’s exercise, on the other hand, was heavily publicized and commanded by Putin himself; he was televised during the exercise alongside “the presidents of Armenia, Belarus, Kyrgyzstan and Tajikistan in the Russian National Defense Command Center,” showing displays depicting nuclear launch positions and impacts.¹¹⁵

In July, nuclear weapons use was implied by Lavrov in response to Ukrainian officials’ comments about retaking Crimea. Promising the return of Crimea to Ukraine was a common refrain among Ukrainian officials, including President Petro Poroshenko.¹¹⁶ However, it was the statements of newly appointed defense minister Colonel General Valeriy Heletey

that triggered a Russian response. “Believe me, there will be a victory parade—there will be for sure—in Ukraine’s Sevastopol,” Heletey said to the Verkhovna Rada in Kyiv.¹¹⁷ At a July 9 press conference, when asked about Heletey’s comments, Lavrov responded by saying, “If it comes to aggression against Russian territory, which Crimea and Sevastopol are parts of, I would not advise anyone to do this. . . . We have the doctrine of national security, and it very clearly regulates the actions, which will be taken in this case.”¹¹⁸ This is a subtle allusion to Russia’s 2010 military doctrine, which states that Russia “reserves the right to utilize nuclear weapons . . . in the event of aggression against the Russian Federation involving the use of conventional weapons when the very existence of the state is under threat.”¹¹⁹

The following month, Putin escalated the nuclear rhetoric during a late August speech at a political youth camp. He blamed the United States and EU for the ouster of Yanukovych and separately said,

Russia is far from being involved in any large-scale conflicts. We don’t want that and don’t plan on it. But naturally, we should always be ready to repel any aggression toward Russia. . . . Russia’s partners . . . should understand it’s best not to mess with us. . . . Thank God, I think no one is thinking of unleashing a large-scale conflict with Russia. I want to remind you that Russia is one of the leading nuclear powers.¹²⁰

Putin again invoked the possibility of nuclear conflict with the United States and EU in October through comments during a visit to Serbia, this time responding to US and EU sanctions: “Our partners need to understand that attempts to

¹¹¹ Kristensen, “Nuclear Exercises Amidst Ukrainian Crisis.”

¹¹² Nikolsky, “Russia Holds Military Drills.”

¹¹³ “Major Russian Exercises Conducted since 2014.”

¹¹⁴ USSTRATCOM Public Affairs, “Global Lightning 14.”

¹¹⁵ Kristensen, “Nuclear Exercises Amidst Ukrainian Crisis.”

¹¹⁶ Keck, “Russia Threatens Nuclear Strikes”; and Zinets, “Poroshenko Names New Defence Chiefs.”

¹¹⁷ Keck, “Russia Threatens Nuclear Strikes”; and Miller, “Ukraine’s New Defence Minister Pledges to Retake Crimea.”

¹¹⁸ Keck, “Russia Threatens Nuclear Strikes.”

¹¹⁹ “Military Doctrine of the Russian Federation,” 8–9.

¹²⁰ “Don’t Mess with Nuclear Russia, Putin Warns.”

destabilize Russia using one-sided, illegitimate, restrictive measures will not stabilise [the situation in Ukraine], but only complicate dialogue,” Putin said.¹²¹ Blaming America’s “hostile” attitude toward Russia, Putin expressed hope that Western leaders would realize “the carelessness of attempts to blackmail Russia,” given “the threat of a fall-out between the largest nuclear powers.”¹²²

In late 2014 and early 2015, it became an object of public debate whether or not the Russian Federation had deployed nuclear weapons in Crimea, a prospect made vague by the dual-use nature of Russia’s nonstrategic nuclear force (including Iskander missile launchers, Tu-22M3 Backfire bombers, and SS-N-12 and SS-N-22 cruise missiles)¹²³ and evasive comments by Russian authorities. Supreme Allied Commander Europe (SACEUR) US General Philip Breedlove announced to the press in November that Russia “moved forces that are capable of being nuclear” to the peninsula.¹²⁴ In December, Lavrov argued that the Russian Federation has the right to deploy nuclear weapons to the peninsula, saying, “Now Crimea has become part of a state which possesses such weapons in accordance with the Nuclear Nonproliferation Treaty. . . . In accordance with international law, Russia has every reason to dispose of its nuclear arsenal . . . to suit its interests and international legal obligations.”¹²⁵ Nevertheless, Russian state-sponsored reporting the next day quoted the Strategic Missile Forces (SMF) commander, Colonel General Sergei Karakayev, as saying, “There are no plans to deploy military SMF units in the Crimean Federal District as there is no need. Today’s long-range ballistic missiles can strike anywhere in the world without bringing

them to the borders of Russia.”¹²⁶ However, the statements did not address the possible presence of nonstrategic nuclear forces. Further muddying the waters were statements by Mikhail Ulyanov, head of the Foreign Ministry’s arms control department, who said, “I don’t know if there are nuclear weapons there now. I don’t know about any plans, but in principle Russia can do it.”¹²⁷

Soon after the April anniversary of Crimea’s annexation and in parallel with the release of the state-sponsored documentary discussed above (wherein Putin alleged the consideration of a nuclear alert in conjunction with the invasion of Crimea), Russia issued the most direct threats of nuclear weapons use associated with the Crimean Peninsula. According to a press report by the *Times*, the threats were made in a high-level meeting in Germany between Russian generals—briefed by Lavrov and speaking with Putin’s approval—and unnamed former US security officials. The original impetus for the meeting was the recently increased NATO force presence in the Baltic states of Estonia, Latvia, and Lithuania. Quoting notes taken by an unnamed American present at the meeting, the *Times* reported that the Russian representatives threatened “a spectrum of responses from nuclear to non-military” if any further buildup occurred.¹²⁸ Separately, the generals cited two other flashpoints that could lead to a direct or nuclear confrontation. One was eastern Ukraine, where the Russian representatives alleged that the provision of lethal military aid to the government in Kyiv would be interpreted as “further encroachment by NATO to the Russian border,” meaning “the Russian people would demand a forceful response.”¹²⁹ The other,

¹²¹ Sharkov, “Putin Issues ‘Nuclear Powers’ Warning.”

¹²² Sharkov, “Putin Issues ‘Nuclear Powers’ Warning.”

¹²³ Kristensen, “Rumors about Nuclear Weapons in Crimea”; and Kristensen, *Non-Strategic Nuclear Weapons*.

¹²⁴ Rachman, “Nuclear Gun Is Back on the Table”

¹²⁵ Bender, “Russia: We Have the Right to Put Nuclear Weapons in Crimea.”

¹²⁶ “Russia Not to Deploy Units”; and “Are Nuclear Launchers in Crimea a Game-Changer?”

¹²⁷ “Russia Says Has Right to Deploy Nuclear Weapons in Crimea”; and “Are Nuclear Launchers in Crimea a Game-Changer?”

¹²⁸ Hoyle, “Putin Threat of Nuclear Showdown.”

¹²⁹ Hoyle, “Putin Threat of Nuclear Showdown.”

more forceful, warning concerned the Crimean Peninsula specifically. Any attempt to return Crimea to Ukraine would see Russia respond “forcefully including through the use of nuclear force.”¹³⁰ While the Americans present at the talks did not see the nuclear threats as viable, considering Russia’s most likely course of action to be “destabilising actions” in the Baltics “without giving NATO a pretext to deploy troops,” Lithuanian opposition leader Andrius Kubilius expressed fears that Putin “could try not a global war but perhaps a small nuclear war” in the Baltics.¹³¹

Official statements concerning the possible deployment of nuclear weapons to Crimea persisted into mid-2015, beginning with a joint statement of the NATO-Ukraine Commission. Published in May, the statement broadly addressed the ongoing crisis in eastern Ukraine but also dedicated a paragraph to the occupation and military buildup of the peninsula, which concluded, “We are also deeply concerned by statements of the Russian leadership with regard to possible future stationing of nuclear weapons and their delivery systems in Crimea, which would be destabilizing.”¹³² The issue was also explicitly cited in a press conference by NATO secretary general Jens Stoltenberg following the meeting.¹³³ This reportedly led to Russian Foreign Ministry official Mikhail Ulyanov once again expressing Russia’s right to station nuclear forces on the peninsula, sparking a back-and-forth

between Ulyanov and Ukrainian foreign minister Pavlo Klimkin, who insisted that

The deployment of nuclear weapons in Crimea would be the most serious breach in Russia’s international commitment. . . . Any activity or even signals from Russia on the mere possibility of deploying nuclear weapons in Crimea will be considered the gravest breach of all international norms. In this case, the international community will need to react most decisively.¹³⁴

Nuclear Weapon Characteristics

Russia leveraged nuclear threats and posturing after the Crimean referendum to deter intervention against the invasion and solidify the new status quo on the ground. Three characteristics of nuclear weapons played important roles in the Crimea crisis: first, the nonstrategic portion of nuclear arsenals; second, the dual-use nature of delivery vehicles in Russia’s nonstrategic nuclear arsenal; and third, the existence of Russia’s nuclear-first-use doctrine.

In the years leading up to the Ukraine crises, as Russia became more anxious about the accession of former Soviet states into NATO, assessments of Russian exercises revealed comparatively limited conventional capabilities. This conventional asymmetry and growing tension led Russia to greater dependence on nonstrategic nuclear weapons.¹³⁵ During the crisis, Russia maintained a decisive superiority in the number of nonstrategic nuclear weapons in theater (see the appendix). In Crimea, the interplay between Russia’s conventional and nonstrategic nuclear forces appears to be the use of the former to change facts on the ground, supported by ambiguity and threats around the latter to deter interference.

¹³⁰ Hoyle, “Putin Threat of Nuclear Showdown.”

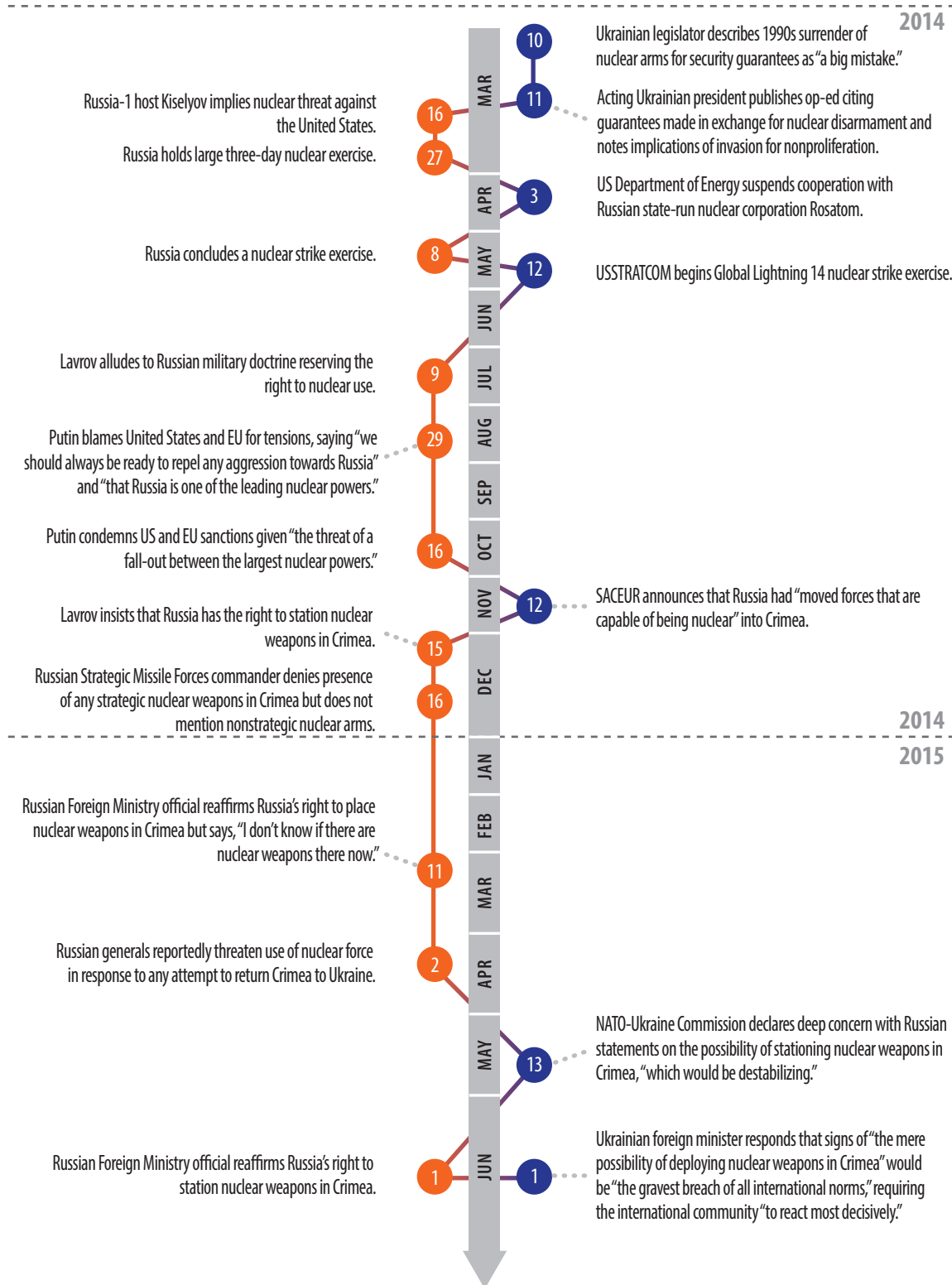
¹³¹ Hoyle, “Putin Threat of Nuclear Showdown.” In late March 2015, Russian military analyst Konstantin Sivkov published an article in the Russian newspaper *VPK News* advocating for a deterrence strategy involving the threat of strategic nuclear strikes on geographic features of the mainland United States that would allegedly trigger natural disasters. However, because of the unusual nature of the article, the author’s distance from Russian leadership, and the lack of direct reference to the crisis in Crimea, relevance to the crisis as an instance of nuclear posturing could not be established. See Tan, “Russian Analyst Urges Nuclear Attack on Yellowstone.”

¹³² “Joint Statement of the NATO-Ukraine Commission.”

¹³³ Stoltenberg, “Press Conference.”

¹³⁴ Keck, “Russia Threatens to Deploy Nuclear Weapons.”

¹³⁵ Kristensen, *Non-Strategic Nuclear Weapons*, 77–78; and Sinovets, *Nuclear Element in Russia’s Asymmetric Warfare Strategies*.



Russian nuclear posturing began on the day of the Crimean independence referendum. Putin and Lavrov alluded to Russia's nuclear strength and prospective first use, after which public statements shifted to the possible presence of nuclear weapons in Crimea. In the public record, Russia's most direct and high-profile communication of a nuclear red line in Crimea took place at an April 2015 meeting in Germany between Russian generals and unnamed former US national security officials.

Figure 8. Nuclear Weapons in the Crisis Time Line

As observed by Thomas C. Moore, “Russian nuclear signaling is a pervasive element of Russian policy, and while this signaling is meant to convey strength, [it] has two objectives. The first is to display to the United States its nuclear resolve and the second is to test the reactions of US allies in Europe and the world over.”¹³⁶

A distinctive characteristic of Russian nonstrategic nuclear-capable forces is that they are dual-use with conventional weapons, raising “some important questions about intentional and unintentional signals and the risk that nuclear weapons could unintentionally get pulled into a crisis and exacerbate the threat perception.”¹³⁷ As discussed, when Russia took control of the Crimean Peninsula, the movement of dual-use platforms led to debate and concern among US military and political leaders. Although Russia had already held similar platforms at installations in Crimea for some time, the ambiguity combined with Russian statements on nuclear use heightened tensions around nonstrategic nuclear arms during the crisis in “tit-for-tat action-reaction posturing, whether intended or not.”¹³⁸

Finally, the nature of Russia’s standing military doctrine at the time of the crisis was a factor directly referenced by Russian political leadership in public comments alluding to the use of nuclear force.¹³⁹ The 2010 military doctrine reserved the right for the first use of nuclear weapons “in the event of aggression against the Russian Federation involving the use of conventional weapons when the very existence of the state is under threat.”¹⁴⁰ This element of Russian military doctrine colored

the crisis, serving to validate comments on nuclear first use and the movement of dual-use weapons.

US Deliberations and Responses

The stated goal of the United States, alongside the EU, was to maintain the territorial integrity of Ukraine. Russia’s earliest nuclear messaging against the United States, delivered through state media during Russian actions in Crimea,¹⁴¹ and its later policy statements indicate that the Russian Federation viewed the crises in Ukraine as tantamount to a confrontation with the United States and the EU.¹⁴² Nevertheless, US and EU responses to the invasion of Crimea remained diplomatic and economic, restricted to statements of condemnation and economic sanctions. Starting with the March 3 announcement that there would be no presidential delegation to the 2014 Paralympics in Sochi,¹⁴³ the actions then escalated through two rounds of economic sanctions targeting key Russian figures and institutions involved in the invasion¹⁴⁴ and the congressional debate of bills condemning the developments.¹⁴⁵ Although the United States would later offer military aid to Ukraine in response to Russia’s subsequent invasion of eastern Ukraine, the only other American action solely responsive to the annexation of Crimea was the US Department of Energy’s suspension of cooperation projects with

¹³⁶ Moore, “Role of Nuclear Weapons During the Crisis in Ukraine.”

¹³⁷ Kristensen and Norris, “Russian Nuclear Forces, 2015,” 84–97.

¹³⁸ Kristensen, “Rumors about Nuclear Weapons in Crimea.”

¹³⁹ Keck, “Russia Threatens Nuclear Strike.”

¹⁴⁰ “Military Doctrine of the Russian Federation,” 8–9.

¹⁴¹ Jackson, “Russia Could Turn USA into Radioactive Ashes.”

¹⁴² Felgenhauer, “Putin: Ukraine Is a Battlefield”; Felgenhauer, “Putin Pushing Back”; Felgenhauer, “Kremlin Sees Ukraine Crisis as Part of Overall US-Led Assault on Russia”; Tsygankov, “Russia’s International Assertiveness,” 39; Trenin, “Russia’s Spheres of Interest, Not Influence,” 3–22; and AOWG, *Ambiguous Threats, Phase 2*, 9.

¹⁴³ Brady, “USA Won’t Send Presidential Delegation to Sochi Paralympics.”

¹⁴⁴ Obama, “Executive Order—Blocking Property of Certain Persons”; and Obama, “Executive Order—Blocking Property of Additional Persons.”

¹⁴⁵ Support for the Sovereignty, Integrity, Democracy, and Economic Stability of Ukraine Act of 2014, H.R. 4152; Congressional Budget Office, *Cost Estimate*; and Ukraine Support Act, H.R. 4278.

the Russian state-run nuclear corporation Rosatom.¹⁴⁶ NATO also suspended cooperation with Russia on April 1, 2014.¹⁴⁷ The only other European sanctions postdate the annexation of Crimea, overlapping with the invasion of Donbass—exclusion of Russia from the G7 meeting in Brussels (in lieu of a planned G8 in Sochi), cancellation of an EU–Russia summit, suspension of bilateral talks by EU members, restrictions on business in Crimea, and targeted sanctions against Russian figures and entities (asset freezes and visa bans).¹⁴⁸

Statements of US senators and press reports on government officials' comments indicate that the United States was surprised by the invasion, suggesting that it was an intelligence failure.¹⁴⁹ Public reporting based on comments of "U.S. officials familiar with intelligence on the . . . situation in Ukraine" indicate that while "analytic products from the intelligence community . . . did not discount the prospect of Russian provocations and even light incursions in the Russian majority province of Crimea . . . until Friday, no one anticipated a Russian invasion of Ukrainian territory."¹⁵⁰ A Senate aide was quoted as saying the following on Ukraine at the time: "Nobody thought Putin was going to invade last night. . . . He has the G8 summit in Sochi coming up, no one really saw this kind of thing coming. . . . There is still a question about whether this is Russian troops coming across the border or Russian troops moving around the installations in Crimea."¹⁵¹

However, an intelligence failure does not fully account for the pronounced restraint of US actions, which was as much a conscious policy decision

as a result of strategic surprise. President Obama was at the center of public disagreements with congressional leaders¹⁵² and military advisers seeking more assertive actions against Russia, including "increasing military exercises, forward deploying additional military equipment and personnel, and increasing [US] naval, air, and ground presence."¹⁵³ The administration's restraint would continue through the subsequent crisis in Donbass.¹⁵⁴ In an extended interview concerning his foreign policies, President Obama implied a belief that, because Ukraine is a more central national interest to Russia than the United States, Russia will always have more resolve in any competition for escalatory dominance. "The fact is that Ukraine, which is a non-NATO country, is going to be vulnerable to military domination by Russia no matter what we do."¹⁵⁵

Conclusion

In the Crimea crisis, the Russian Federation—which viewed the confrontation with greater gravity, held an advantage in the proximity of conventional forces, and maintained nonstrategic nuclear superiority—acted to change the facts on the ground while seeking to deter intervention with overt nuclear messaging. Ambiguity around dual-use weapons platforms being moved to the peninsula, alongside official statements suggesting the possible placement of nuclear arms in Crimea, likewise served to reinforce Russia's nuclear messaging. While the United States had overall nuclear superiority (see the appendix), this did not translate into greater resolve or victory.

In his *International Organization* article "Nuclear Superiority and the Balance of Resolve: Explaining

¹⁴⁶ Guschin, "US Energy Department Suspends Peaceful Atom Projects with Russia."

¹⁴⁷ "Ukraine Crisis Timeline."

¹⁴⁸ "EU Sanctions against Russia over Ukraine Crisis."

¹⁴⁹ Everett and Gerstein, "Why Didn't the U.S. Know Sooner?"

¹⁵⁰ Lake and Dickey, "U.S. Spies."

¹⁵¹ Lake and Dickey, "U.S. Spies."

¹⁵² "Armed Services Leaders Urge President to Act on Ukraine."

¹⁵³ Lake, "General Splits with Obama over Ukraine."

¹⁵⁴ Steinhauer and Herszenhorn, "Many in Congress Press to Arm Ukraine."

¹⁵⁵ Goldberg, "Obama Doctrine."

Nuclear Crisis Outcomes,” Matthew Kroenig concludes that “states that enjoy nuclear superiority over their opponents are more likely to prevail in nuclear crises,” arguing “that nuclear crises are competitions in risk taking, but that nuclear superior states are willing to run greater risks than their nuclear inferior counterparts.”¹⁵⁶ Kroenig also affirmed the impact of political stakes and proximity on crisis outcomes but found that the gravity of the crisis did not appear to influence crisis outcomes.¹⁵⁷ Closer examination of the crisis in Crimea confirms some of Kroenig’s findings but challenges others. Russia possessed greater proximity and higher political stakes in the outcome than the United States, and the gravity of the crisis was far greater for Russia as well (see the appendix)—all of which contributed to Russia’s greater resolve. But Russia did not possess nuclear superiority over the United States. Russia did, however, possess a significantly larger nonstrategic nuclear arsenal, as well as a standing doctrine for the first use of nuclear weapons in response to conventional force—an arsenal and doctrine that played an outsized and repeated role in the crisis.

So while the state with overall nuclear superiority did not achieve its objectives in the crisis, the state with nonstrategic nuclear superiority, higher stakes in the outcome of the crisis, the proximity and conventional capability to seize the initiative to invade, and standing first-use doctrine to buttress threats of nuclear use prevailed. These findings imply that the academic community should consider the nonstrategic nuclear balance and the perceived plausibility of first-use threats in addition to overall arsenal balance in future studies of nuclear crises for their impacts on resolve and outcomes in a crisis.

Finally, the way in which Russia brandished its nonstrategic nuclear arsenal and first-use policy during the crisis in Crimea should inform the policy community of how Russia might seek to intimidate and deter the United States in future crises. In Crimea, the United States did not escalate in response to Russian nuclear posturing, appearing to determine that the US objective in the crisis was not vital enough to merit military engagement or overt nuclear posturing in response. Knowing that the United States did not intend to intervene militarily, US figures at the table during the crisis did not consider nuclear red lines drawn by Russia to be viable threats.¹⁵⁸ But it appears that Russia did not take US nonintervention as a given, brandishing nuclear weapons with an aim to deter the United States. Were this a NATO nation, US responses would likely be more urgent and the threat of tactical nuclear use considered a more plausible Russian response to US conventional force. Future US strategy development, war games, and national security exercises should account for Russia’s nonstrategic nuclear arsenal and how it is leveraged to threaten and intimidate the US and its allies. The United States needs a strategic approach to deterring aggressive Russian revisionist actions in the future, and that approach needs to account for the threat of nonstrategic nuclear weapons.

¹⁵⁶ Kroenig, “Nuclear Superiority and the Balance of Resolve,” 166.

¹⁵⁷ Kroenig, “Nuclear Superiority and the Balance of Resolve,” 166.

¹⁵⁸ Hoyle, “Putin Threat of Nuclear Showdown.”

Appendix Coding of Crimea Case Study Variables

The analysis presented here codes the Crimea crisis as a nuclear crisis between the Russian Federation and the United States (see the introduction). Because of the persistence of Russia's de facto control over the Crimean Peninsula with minimal resistance and no military action by the United States (despite deliberations), the outcome is coded as a win for the Russian Federation—which achieved its objective of ensuring control over the peninsula—and a loss for the United States—which failed to achieve its objective of preserving the territorial integrity of Ukraine. Control variables are detailed below as appropriate, including extensive discussion of the Nuclear Ratio and Superiority variables, as the available data presents challenging questions that require assumptions for coding.

Table A-1. Coding of Variables for Crimea Nuclear Crisis

Variable	Dyad		Coding
Outcome	US	Russia	US loss (0)
	Russia	US	Russia win (1)
Overall Nuclear Superiority	US	Russia	US superior (1)
	Russia	US	Russia inferior (0)
NSNW Superiority	US	Russia	US inferior (0)
	Russia	US	Russia superior (1)
Capabilities (2012) ^a	US	Russia	US greater: 0.78
	Russia	US	Russia fewer: 0.22
Gravity	US	Russia	US less grave (0)
	Russia	US	Russia more grave (1)
Nuclear Ratio	US	Russia	US higher: 0.52
	Russia	US	Russia lower: 0.47
Population	US	Russia	US larger population (1)
	Russia	US	Russia smaller population (0)
Proximity	US	Russia	US Less proximity (0)
	Russia	US	Russia greater proximity (1)
Regime	US	Russia	US more democratic (1)
	Russia	US	Russia less democratic (0)
Second Strike	US	Russia	US second-strike capable (1)
	Russia	US	Russia second-strike capable (1)
Security	US	Russia	US lower security: 0.7368
	Russia	US	Russia higher security 0.4526
Violence	US	Russia	US no violence (1)
	Russia	US	Russia minor violence (2)

^a Because no Correlates of War data exists for 2014, the 2012 data in Version 5.0 is used as the closest equivalent. USA 2012 = 0.139353; RUS 2012 = 0.040079; Combined = 0.179432 (Greig and Enterline; NMC Data Documentation; and Singer, Bremer, and Stuckey, "Capability Distribution").

Necessary Assumptions: Nuclear Ratio



Figure A-1. Minuteman III Launches from Vandenberg

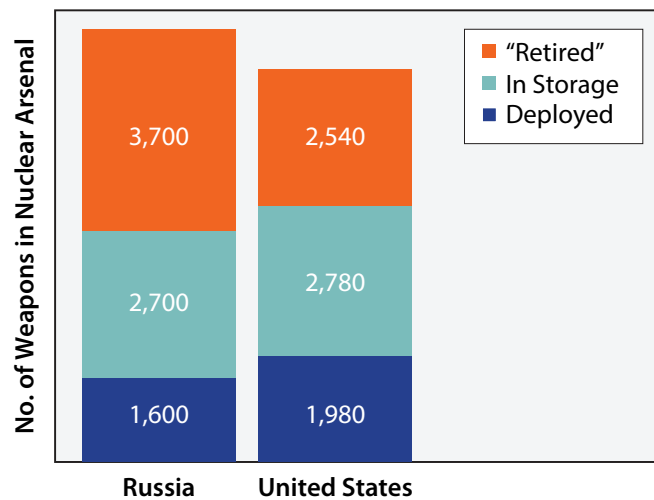
The nature of the available data on the nuclear balance between Russia and the United States creates a certain level of ambiguity around which actor truly held nuclear superiority during the invasion of Crimea. When using the data for an analysis of the nuclear crisis around Crimea, several assumptions are necessary to code the values for the Nuclear Ratio and Superiority variables. When the assumptions detailed below are accepted as valid, one is able to code the Superiority variable as tipping slightly in the favor of the United States over the Russian Federation, with a Nuclear Ratio of 0.52 and 0.47, respectively. Nevertheless, due to apparent discrepancies in how nuclear armaments have been counted through the years, the number of arms allows for the possibility that the Russian Federation had nuclear superiority in 2014.

Taken at face value, the 2014 worldwide deployments report shows a Russian superiority with 8,000 warheads (see Figure A-2), noting that “approximately 4,300 of the Russian warheads are operational or in military custody. The remaining 3,700 warheads are thought to be excess warheads awaiting dismantlement.”¹⁵⁹ The United States, on the other hand, is estimated to hold 7,300 warheads, but a clarifying note states that “approximately 4,760 of the U.S. warheads are in the military stockpile (about 1,980 deployed); 2,540 retired warheads are awaiting dismantlement.”¹⁶⁰

¹⁵⁹ Kristensen and Norris, “Worldwide Deployments of Nuclear Weapons, 2014.”

¹⁶⁰ Kristensen and Norris, “Worldwide Deployments of Nuclear Weapons, 2014.”

In later years, however, the nuclear balance was portrayed differently in this data. While the authors estimated “nuclear weapons inventories” as of 2014,¹⁶¹ by 2019 this was changed to add precision and distinguish between “Military Stockpile” and “Total Inventory.”¹⁶² Under this new paradigm, the Military Stockpile count for both Russia and the United States is defined as “warheads in the custody of the military and earmarked for use by military forces,” being the sum of deployed strategic weapons, deployed nonstrategic weapons, and “Reserve/Nondeployed” weapons.¹⁶³ The total inventory, on the other hand, “counts warheads in the military stockpile as well as retired, but still intact, warheads awaiting dismantlement,”¹⁶⁴ implying that this category of warhead should be excluded from arsenal counts. The 2019 note on Russia’s total inventory contains a caveat similar to that in the 2014 worldwide deployments report data, referring to warheads “thought to be awaiting dismantlement,” subsequently noting that “details are scarce.”¹⁶⁵



For the 2014 data, the “Retired” label has different meanings for each country. For Russia, it means warheads “thought to be excess warheads awaiting dismantlement.” For the United States, it means “retired warheads [that] are awaiting dismantlement” (Kristensen and Norris, “Worldwide Deployments of Nuclear Weapons, 2014”). Sources: Kristensen and Norris, “Worldwide Deployments of Nuclear Weapons, 2014”; Kristensen and Norris, “US Nuclear Forces, 2014”; and Kristensen and Norris, “Russian Nuclear Forces, 2014.”

**Figure A-2. 2014 Nuclear Arsenal Balance:
Russia and the United States**

¹⁶¹ Kristensen and Norris, “Worldwide Deployments of Nuclear Weapons, 2014.”

¹⁶² Kristensen and Korda, “Status of World Nuclear Forces.”

¹⁶³ Kristensen and Korda, “Status of World Nuclear Forces.”

¹⁶⁴ Kristensen and Korda, “Status of World Nuclear Forces.”

¹⁶⁵ Kristensen and Korda, “Status of World Nuclear Forces.”

In the data appendices of his analysis, Matthew Kroenig does not elaborate on whether or not “retired” warheads are included in a state’s “arsenal.”¹⁶⁶ However, he does cite “the National Resource Defense Council’s online nuclear database,” or “NRDC Nuclear Data,” as among his sources for assessing nuclear arsenal counts.¹⁶⁷ While the NRDC data only covers 1945–2002, its structure appears to be consistent with later approaches in the worldwide deployments reports that exclude certain categories of warheads from the total arsenal count. In fact, the NRDC data appears not only to exclude such warheads from much of its data but also to treat such data inconsistently between the United States and Soviet Union/Russian Federation. According to the NRDC’s “Archive of Nuclear Data,” while US warhead estimates only exclude “a small number of warheads awaiting dismantlement,” counts for the Soviet Union and Russia exclude both “warheads awaiting dismantlement” *and* those “in reserve status.”¹⁶⁸ The NRDC’s approach suggests two important conclusions: First, “nuclear arsenal size” as assessed by Kroenig is more consistent with the worldwide deployments report definition of Military Stockpile than Total Inventory, meaning the exclusion of retired warheads awaiting dismantlement. Second, it suggests that warheads “in reserve status” are not treated consistently across the historical data.

The history of how retired warheads are counted is critical for this analysis because of the nuclear balance data for 2014 (see Figure A-2). If retired warheads are counted in state arsenals for 2014, then the Russian Federation has nuclear superiority. However, if retired warheads are not counted, then the United States has superiority. Additionally, the NRDC method of excluding reserve warheads for Russia, but not the United States, would significantly impact the Nuclear Ratio variable, if not superiority. Therefore, to simply subtract “Retired” warheads from the arsenal counts of both states, the following two assumptions are necessary:

- **Assumption:** The nuclear arsenals of the United States and the Russian Federation in 2014 consist of deployed strategic weapons, deployed nonstrategic weapons, and weapons that are nondeployed or in reserves, while remaining “in the custody of the military and earmarked for use by military forces.”¹⁶⁹ Further, the US and Russian nuclear arsenals exclude weapons that are retired and awaiting dismantlement.
- **Assumption:** In the 2014 worldwide deployments report data concerning US and Russian nuclear weapons, the Russian warheads “thought to be . . . awaiting dismantlement” are equivalent to the US warheads that are “retired . . . [and] awaiting dismantlement.”¹⁷⁰

The assumed equivalency between the retired warhead categories for the United States and Russian Federation requires additional attention. Author commentary accompanying the 2014 worldwide deployments report data casts doubt on the accuracy of the count of retired Russian warheads because of scant public information and potentially obfuscating nuclear storage practices. Up front in its commentary, the authors note “considerable uncertainty” around Russian nuclear storage sites, citing a lack of public

¹⁶⁶ Kroenig, “Data Appendices,” 1.

¹⁶⁷ Kroenig, “Data Appendices,” 1.

¹⁶⁸ “Table of Global Nuclear Weapons Stockpiles, 1945–2002.”

¹⁶⁹ Kristensen and Korda, “Status of World Nuclear Forces.”

¹⁷⁰ Kristensen and Norris, “Worldwide Deployments of Nuclear Weapons, 2014.”

information and inconsistent counting methods.¹⁷¹ Most important for the sake of this analysis, however, is how the worldwide deployments report categorizes “Russian permanent nuclear weapon storage locations” in 2014, listing three categories: “operational warheads at Strategic Rocket Force, navy and air force bases; non-strategic and reserve/retired warheads at national-level storage sites; and warheads at assembly/disassembly factories.”¹⁷² Specifically, the conflation of nonstrategic, reserve, and retired warheads under a single “national-level storage” location category¹⁷³ has important implications for the assumptions detailed above and, therefore, for both the Superiority and Nuclear Ratio variables.

The 2014 author commentary elaborates on the “national-level storage sites,” saying they “include 12 separate storage sites, although the status of a few of these is unclear.”¹⁷⁴ In an earlier report on Russia’s 2014 arsenal, the author commentary reflects the uncertainty around counts associated with the warhead categories related to these storage sites: “Another 700 strategic warheads are in storage along with roughly 2,000 nonstrategic warheads. A large number—perhaps 3,500—of retired but still largely intact warheads await dismantlement.”¹⁷⁵ The potential for intentional obfuscation of reserve and retired nuclear weapons by the Russian Federation is significant, as such a deception could lead to the unintended exclusion of nonstrategic and reserve warheads—misidentified as retired and “thought to be ... awaiting dismantlement”¹⁷⁶—from the nuclear arsenal count. Because of the near US–Russian parity in 2014 and the large number of ostensibly retired Russian weapons (see Figure A-2), such an obfuscation could change which actor is coded as possessing nuclear superiority. Therefore, the following assumption is necessary:

- **Assumption:** The Russian storage of “retired but still largely intact warheads” alongside nonstrategic and reserve warheads at “national-level storage sites” does not significantly obfuscate or corrupt the count of reserve and retired Russian warheads in the 2014 worldwide deployments report data.¹⁷⁷

Nonstrategic Nuclear Weapons

Kroenig’s analysis of nuclear crises does not distinguish between strategic and nonstrategic nuclear weapons because “date[s] distinguishing between tactical and strategic weapons . . . are not available for each nuclear weapon state in each year.”¹⁷⁸ Instead, his assessment of nuclear arsenals is a single warhead count, “including both tactical and strategic weapons.”¹⁷⁹ While data availability prevents accounting for nonstrategic weapons across all nuclear crises, there are cases where the data is available and the distinction might matter a great deal, especially in crises along Russia’s “near abroad.”

By 2014, Russia had more nonstrategic nuclear weapons than the United States. While the United States had “approximately 180 non-strategic nuclear bombs . . . stored . . . at six bases in five European countries

¹⁷¹ Kristensen and Norris, “Worldwide Deployments of Nuclear Weapons, 2014.”

¹⁷² Kristensen and Norris, “Worldwide Deployments of Nuclear Weapons, 2014.”

¹⁷³ Kristensen and Norris, “Worldwide Deployments of Nuclear Weapons, 2014.”

¹⁷⁴ Kristensen and Norris, “Worldwide Deployments of Nuclear Weapons, 2014.”

¹⁷⁵ Kristensen and Norris, “Russian Nuclear Forces, 2014.”

¹⁷⁶ Kristensen and Norris, “Worldwide Deployments of Nuclear Weapons, 2014.”

¹⁷⁷ Kristensen and Norris, “Russian Nuclear Forces, 2014.”

¹⁷⁸ Kroenig, “Data Appendices,” 1.

¹⁷⁹ Kroenig, “Data Appendices,” 1.

(Belgium, Germany, Italy, the Netherlands, and Turkey) for delivery by US and NATO fighter-bombers,”¹⁸⁰ Russia maintained “roughly 2,000 nonstrategic warheads.”¹⁸¹ However, the authors estimate at the time indicate that none of Russia’s nonstrategic warheads were deployed, with all of them in storage. Nevertheless, the numeric superiority allows for the following assumption:

- **Assumption:** Russia maintains regional nonstrategic nuclear dominance in 2014, despite the fact that none of its approximately 2,000 nonstrategic warheads are reported as deployed.

Control Variables

Gravity

As defined by the ICB, the Gravity variable “identifies the object of gravest threat at any time during the crisis, as perceived by the principal decision makers of the crisis actor,” coding the most severe value threatened throughout the course of the crisis.¹⁸²

Gravity of crisis was significantly greater for Russia than for the United States.

- **(0) Economic threat:** While the more substantial economic threat was the Ukraine’s pre-crisis movement away from EAEU and toward the EU, there are significant Russian industries, ports, and tourism on the Crimean Peninsula.
- **(1) Limited military damage:** Russia stood to lose a major military installation should it fail to secure control of the peninsula.
- **(2) Political threat:** Threat perceptions in Russia see overlap between regime stability at home and political instability in other former Soviet states. Pro-democracy movements in bordering states are seen as a direct threat to the Kremlin through contamination. Removal of Yanukovych prompted fears of popular protest efforts for regime change in Russia.
- **(3) Territorial threat:** While the crisis posed no direct threat to any recognized Russian territory, Russia has at times contested the status of the peninsula since the collapse of the Soviet Union—disputes that were revived in the midst of Ukrainian Westward drift. In addition, the possibility of losing the long-term lease on the Port of Sevastopol could be considered a rough equivalent to a small (yet strategically significant) territorial threat.
- **(4) Threat to influence:** The removal of Yanukovych constituted major blowback and a decisive loss of Russian influence in Ukraine. The United States likewise stood to lose influence if it failed to preserve Ukraine’s territorial integrity.
- **(5) Threat of grave damage:** Neither actor faced a threat of grave damage (i.e., “large casualties in war, mass bombings”¹⁸³).

¹⁸⁰ Kristensen and Norris, “Worldwide Deployments of Nuclear Weapons, 2014.”

¹⁸¹ Kristensen and Norris, “Russian Nuclear Forces, 2014.”

¹⁸² Brecher et al., *International Crisis Behavior Data Codebook*, 43–44.

¹⁸³ Brecher et al., *International Crisis Behavior Data Codebook*, 44.

- **(6) Threat to existence:** It appears that neither actor faced a threat to its existence. Nevertheless, Russia's rationalization for invasion cited the threat of ethnolinguistic persecution, even genocide, against Russian speakers in Ukraine (e.g., new Ukrainian language laws). While it is possible that these threats were not realistic or perceived, their prominence in domestic and international justification for initiating the crisis cannot be ignored.

Table A-2. Gravity of the Crimea Crisis

Variable No.	Variable Title	US	Russia
0	Economic threat	×	✓
1	Limited military damage	×	✓
2	Political threat	×	✓
3	Territorial threat	×	✓ ^a
4	Threat to influence	✓	✓
5	Threat of grave damage	×	×
6	Threat to existence	×	✓ ^b

^a No Russian territory was threatened, but the presence of the Black Sea Fleet in Sevastopol and revival of territorial claims to the peninsula make this variable opaque.

^b While no threat to Russia's existence seemed to exist, Russian officials cited fears of genocide against Russian speakers in Crimea as a justification for the invasion. As genocide is included in the definition of the variable, it is included here with the note that this might have been a propaganda narrative.

Proximity

This binary variable measures which country is closer to the geographic location of the crisis.¹⁸⁴ The Crimea crisis occurred in Ukraine and along Russia's southwestern border. Therefore, the crisis was more proximate to the Russian Federation than to the United States.

Population

Studies on nuclear crises often assume that "states with larger populations are better able to absorb a nuclear attack and, therefore, may push harder in a crisis," making a measure of a state's total population necessary.¹⁸⁵ The United States has a larger population than Russia. While *Correlates of War* only reflects data through 2012,¹⁸⁶ because the control variable is expressed as a binary, exact population estimates for 2014 are not necessary for this analysis. According to the CIA *World Factbook*, as of July 2014, Russia and the United States were estimated to have populations of 142,470,272 and 318,892,103, respectively.¹⁸⁷

¹⁸⁴ Kroenig, "Nuclear Superiority and the Balance of Resolve," 156.

¹⁸⁵ Kroenig, "Nuclear Superiority and the Balance of Resolve," 157.

¹⁸⁶ US tpop (total population – thousands) 317505 (i.e., 317,505,000); RU tpop 143170 (i.e., 143,170,000). Population of State, *Correlates of War*, NMC, v 5.0, 2012.

¹⁸⁷ "United States," *World Factbook*; and "Russia," *World Factbook*.

Regime

Regime type (from autocratic to democratic) is measured because of the potential relative effect of domestic audiences on the choice to commit to a confrontation and on the likelihood of success.¹⁸⁸ The United States is more democratic than the Russian Federation. According to Polity IV's Democratic—Autocratic scale, the United States is a “Full Democracy” (10) while Russia is an “Open Autocracy” (4).¹⁸⁹ Despite Russia being an autocratic regime, it appears Putin nevertheless went to great lengths to secure popular domestic support for the invasion of Ukraine.

Second Strike

The Second Strike variable concerns whether or not the actors possess forces able to assure a nuclear response after absorbing an initial strike (e.g., submarine-launched ballistic missiles).¹⁹⁰ Both Russia and the United States have second-strike capability.

Security

The Security variable controls for the possibility of states with underlying, long-standing disputes that may be less likely to prevail in crises. This is done by averaging the number of crises the country experiences each year.¹⁹¹ According to this metric, the United States is less secure than Russia.¹⁹²

- US lower security: $\sim 70/95 = 0.7368$
- Russian Federation higher security: $\sim 43/95 = 0.4526$

Violence

The Violence variable measures intensity and ranges from 1, no violence, to 4, full-scale war.¹⁹³ When considering the crisis in Crimea, the United States did not use any force, while Russian forces participated in what can be coded as 2, minor clashes.

- Two soldiers were killed.¹⁹⁴
- Sixty to eighty Ukrainian soldiers were detained.¹⁹⁵

¹⁸⁸ Kroenig, “Nuclear Superiority and the Balance of Resolve,” 157.

¹⁸⁹ Marshall, “Authority Trends, 1946–2013: United States”; Marshall, “Authority Trends, 1946–2013: Russia”; and “Polity IV Country Report 2010: Russia.”

¹⁹⁰ Kroenig, “Nuclear Superiority and the Balance of Resolve,” 157.

¹⁹¹ Kroenig, “Nuclear Superiority and the Balance of Resolve,” 158.

¹⁹² Brecher et al., *International Crisis Behavior Data Codebook*, Actor-level Data.

¹⁹³ Brecher et al., *International Crisis Behavior Data Codebook*, 12–13; and Kroenig, “Nuclear Superiority and the Balance of Resolve,” 157.

¹⁹⁴ Grove, “Russian Marine Kills Ukraine Navy Officer.”

¹⁹⁵ Vasovic and Baczynska, “Acknowledging Defeat, Ukraine Pulls Troops from Crimea.”

- Disguised Russian troops occupied airports, set up roadblocks, and occupied the regional legislature at gunpoint.¹⁹⁶
- Warning shots were fired over heads.¹⁹⁷
- Ukrainian military bases were seized.¹⁹⁸
- Naval ports were blockaded.¹⁹⁹

¹⁹⁶ AOWG, *Ambiguous Threats, Phase 1*, 57.

¹⁹⁷ “Warning Shots Fired at Ukrainian Troops.”

¹⁹⁸ AOWG, *Ambiguous Threats, Phase 1*, 59.

¹⁹⁹ AOWG, *Ambiguous Threats, Phase 1*, 57.

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