PERRY WORLD HOUSE

POST-SIMULATION REPORT

Conflict Simulation: Ukraine Two Years at War

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This exercise is a fictional scenario created solely for the purpose of educational dialogue. It reflects no positions of the US Army, the US government, or the University of Pennsylvania.

ABOUT PERRY WORLD HOUSE

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> SECTION 1

Introduction

<< Two years after the Russian Federation's invasion of Ukraine, Perry World House conducted a conflict similulation, gathering experts to reflect on the trajectory of the war and elucidate policy considerations for the future. >>

Two years after the Russian Federation's invasion of Ukraine, Perry World House conducted a conflict simulation, gathering experts to reflect on the trajectory of the war and elucidate policy considerations for the future. Facilitated by the US Army War College, the simulation featured the participation of military leaders, diplomats, policymakers, and regional security experts who, in the wargame, represented the interests of the Russia Federation (Russia), Ukraine, the United States, and the North Atlantic Treaty Organization (NATO). They examined possible paths the conflict could have taken between March 2023 and September 2024, and based on these scenario outcomes, outlined strategies for the next two years.

The turn-based simulation was adjudicated by wargame specialists Colonel (ret.) Brian Foster, Colonel (ret.) Robert Hamilton, and Colonel Mike Stinchfield from the US Army War College. It comprised three rounds of play, with each session representing a six-month span. Each round tasked participants with achieving private victory conditions[1] unique to the actor they represented. Key scenario considerations included: (1) deterrence and Russia's use of nuclear weapons; (2) increasing global multipolarity and Russia-China relations; (3) connections to US and NATO Indo-Pacific strategy; and (4) support for Ukraine and the role of domestic political audiences in the United States and Western Europe. Summarized below, the actors responded to new and evolving circumstances in each round. A detailed description of their moves and decision-making can be found in Annex I.

- **Round 1**
  Starting in March 2023, participants made strategic and operational moves in pursuit of their national goals in the sequence of Russia, the United States, NATO, Ukraine, and ending with a second Russian turn.

- **Round 2**
  Starting in September 2023, the context of the second round included developments that reshaped conflict dynamics. Finland's accession to NATO and Russia's closure of the grain corridor in the Black Sea marked notable strategic shifts. The death of Yevgeny Prigozhin and the reduced role of the Wagner group in Ukraine altered the battlefield landscape.

1 Each team was assigned victory conditions to achieve throughout the duration of the simulation. The conditions were unique to each team.

- **Round 3**
  In the third and final turn of the simulation, starting in March 2024, and following Russia's continued nuclear escalation, Russia attempted but failed to assassinate Ukrainian President Volodymyr Zelenskyy, resulting in his hospitalization. Despite this outcome, Russia's strategic objectives centered on military mobilization and information warfare to maintain battlefield dominance and sway global perceptions. Successfully mobilizing 500,000 troops, Russia sought to deter dissent within its borders while securing Chinese logistical support to bolster its military capabilities. Operationally, Russia launched massive air attacks around Luhansk, inflicting significant casualties on Ukrainian forces, which had recaptured the entirety of Luhansk in the round.

Based on the outcomes of these three simulated rounds, participants reflected on their positions at the end of the game, postulating strategies and policy recommendations for the next two years of the conflict.

> SECTION 2

Simulated Findings and Key Takeaways

The conflict simulation provided valuable insights into the trajectory of the Russia-Ukraine war and potential future developments. It illuminated critical considerations with regard to external support, heightened geopolitical polarization, information warfare, and nuclear escalation.

The Importance of External Support

The simulation underscored the critical role of external support for Ukraine in securing military victories, emphasizing the need for expedited and sustained assistance to counter Russian aggression. Despite Russian attempts to divide the United States and NATO through information campaigns, as well as significant Russian nuclear escalation, striking Ukrainian victories on the ground were bolstered by significant US and NATO support. Early in the simulation, Ukraine was able to gain material support from the United States and NATO, but their priorities later diverged from Ukraine's in favor of broader Indo-Pacific goals.

Key Takeaways

Participants noted that the gameplay supported the idea that Russia is beatable and that conditions on the ground can be changed with significant military support to Ukraine. There is thus a pressing need for the United States to decide on the level of support it is willing to provide to Ukraine to beat Russia on the battlefield. Ukraine's progress was secured only by strong ties to NATO and the United States. In reality, material support from Ukraine's partners has been hesitant and incremental and will likely result in attrition, tantamount to a Russian victory. NATO Secretary General Jens Stoltenberg recently rebuked member states for their slow rollout of aid to Ukraine: "NATO countries have not delivered [on] their promises, the U.S. spent months not agreeing on a package for Ukraine, European allies have not delivered [on] their promises, and this had a serious consequence on the battlefield."[2]

Geopolitical Polarization

While the simulation concluded with Ukraine retaking Luhansk, Russia's mass mobilization set the stage for future Ukrainian losses. Increasing global multipolarity due to Russian success in garnering support from China and BRICS (an intergovernmental organization comprising Brazil, Russia, India, China, South Africa, Iran, Egypt, Ethiopia, and the United Arab Emirates) played a major

2 Veronika Melkozerova, "NATO's Stoltenberg Rebukes Allies for Tepid Support of Ukraine," *Politico*, April 29, 2024, https://www.politico.eu/article/jens-stoltenberg-says-ukraine-allies-do-not-deliver-their-promises-enables-russia-battlefield-gains/.

role in the simulation. Marking this heightened polarization, the United States and NATO moved from concentrating on the conflict in Ukraine to moving forces to the Pacific and re-engaging global partners in opposition to a Russia-China bloc. Moving forward, policymakers may face trade-offs between coordinating efforts to support Ukraine and addressing broader geopolitical challenges. It is possible that securing Ukraine in the immediate future could better position the United States and NATO to address broader geopolitical competition with Russia and China in years to come.

Key Takeaways

While Ukraine was able to gain material support from the United States and NATO in early turns, US and NATO priorities later moved away from Ukraine as they sought to achieve their broader strategic Indo-Pacific goals. Within the game, Russia won support from China, leaving the United States and NATO with a clearer Russia-China bloc to oppose. In reality, the US and NATO Indo-Pacific strategy may come at Ukraine's expense. Providing Ukraine with military technology and equipment, such as long-range precision-strike missiles, is crucial for securing Ukraine's position so that the United States and NATO can address broader geopolitical competition with Russia and China. Policymakers must consider export controls on technology and supply chains when developing their Ukraine strategy.

Information Warfare

The results of the simulation demonstrated the importance of information warfare in the conflict, as information reigned as the preferred strategic tool across all parties. It emerged as a key determinant of international support, with Ukrainian battlefield success depending on the country's ability to shape the narrative, win over Western political audiences, and garner backing from key partners amid competing strategic interests. All parties in the simulation sought to control information to earn support abroad, with Zelenskyy bringing the war to an international audience and Russia executing disinformation campaigns. In anticipation of the 2024 US presidential election, the battle for the narrative will only grow in significance as Ukraine aims to convince the United States, NATO, and other potential allies that their priorities align. In the face of an increasingly escalatory international atmosphere, controlling the storyline may be key to securing regional stability.

Key Takeaways

Information is a critical strategic instrument, and to secure stable support, Kyiv must win the war of the narrative among national leaders and their domestic contingents. However, in reality, despite Zelenskyy's significant successes at bringing the war to an international audience, the United States has not responded with urgency. US President Joe Biden gave no formal address on Ukraine until violence broke out in Gaza in October 2023, some twenty months after the Russian invasion. In the simulation and in reality, participants noted that the result of 2024 US presidential election and the Ukrainian war narrative that develops as a result will be a key deciding factor in the ultimate outcome of the conflict.

Nuclear Escalation

Concerns over nuclear escalation centered largely on Crimea, which is key to Russian strategy in the Black Sea and the Kremlin's narrative of Russian nationalism.[3] Simulated outcomes underscored the need for continued diplomatic efforts to deter such actions while also bolstering Ukraine's defensive capabilities. In the game, nuclear deterrence prevailed, and pressure from both Russia's Western competitors and China kept nuclear weapons off the table. Instead, Russia might continue to

3 James Acton, "The Case for Caution on Crimea," *War on the Rocks*, February 2, 2023, https://warontherocks.com/2023/02/the-case-for-caution-on-crimea/.

wear down and outlast international support for Ukraine, essentially winning the war by attrition. Providing Ukraine with military technology and equipment, such as long-range precision-strike missiles, could prevent this outcome without nuclear escalation.

Key Takeaways

While participants agreed that that Crimea would be the most likely issue over which Russia would be willing to use nuclear weapons, they disagreed on the risk of nuclear escalation in the reality of the Russia-Ukraine war as well as on how escalation was modeled in-game. Some participants noted that there is deep concern, particularly in the United States, about the possibility of Russia using tactical nuclear weapons; others suggested that the simulation placed too much emphasis on nuclear escalation because breaking the nuclear taboo would only result in mass international retaliation. China's influence on Russia may also continue to dampen Russian nuclear ambitions.

> SECTION 3

Policy Recommendations and Next Steps

United States

The upcoming US presidential election may significantly change or reduce existing US support to Ukraine. To mitigate any potential damage and strengthen ties, regardless of administration, pro-Ukraine US policymakers should emphasize Ukrainian battlefield victories to win bipartisan favor. Highlighting these wins could bolster popular support for continued involvement in the conflict and reinforce the narrative that the war is not at a stalemate. Welcoming Ukrainian politicians and civil society members to directly speak to their states and districts would be another way for pro-Ukraine US politicians to sway domestic support for the cause. On the domestic side, US politicians and the Biden administration should better inform the American public about the economic benefits of US military support for Ukraine. At least thirty-one states and seventy-one cities across the country produce weapons and systems sent to Ukraine through US assistance packages. Nearly 90 percent of the funding goes to Americans.[4] In the broader foreign policy context, Washington understands the implications of its Ukraine support for a possible cross-Strait conflict with the People's Republic of China.

NATO

The anticipation of the US presidential election, coupled with the prospect of a new NATO secretary general, will necessitate that NATO take a cautious approach to major decisions. However, NATO should continue to develop its Black Sea strategy, as both the simulation and reality show no halt to the escalation of great power competition in that region. Such strategic moves include improving relations with pro-Russia states, re-engaging global partners, and actively seeking to limit Russian engagement with the Global South. NATO should consider Ukrainian membership, despite comparisons between it and Georgia, which also has courted membership. Ukraine's tenacity in the Russia-Ukraine conflict proves that Ukraine is not a defensive liability to NATO, and therefore, Ukraine's NATO membership prospects should be uncoupled from conversations about the future of Georgia's Western integration. The two countries have very different records, yet Ukraine is still seemingly stuck in this paradigm.

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4 Marc A. Thiessen, "Ukraine Aid's Best-Kept Secret: Most of the Money Stays in the U.S.A.," *The Washington Post*, November 29, 2023, https://www.washingtonpost.com/opinions/2023/11/29/ukraine-military-aid-american-economy-boost/; Mark Cancian, "Most 'Aid to Ukraine' Is Spent in the US. A Total Shutdown Would Be Irresponsible," *Breaking Defense*, October 3, 2023, https://breakingdefense.com/2023/10/most-aid-to-ukraine-is-spent-in-the-us-a-total-shutdown-would-be-irresponsible/; and Jeffrey A. Sonnenfield and Steven Tian, "What the U.S. Has to Gain from Supporting Ukraine," *Yale Insights*, February 15, 2024, https://insights.som.yale.edu/insights/what-the-us-has-to-gain-from-supporting-ukraine.

Russia

A war of attrition and a frozen conflict would be a victory for Moscow, as international support for Ukraine will likely wane over time if Ukraine achieves few battlefield developments. Russia may seek to prolong the war to slow or halt Ukraine's integration into NATO. One potential solution could involve offering territory fully under Ukrainian control a protected status in NATO without full membership, through an action-oriented integration process.

Ukraine

It is crucial for Ukraine to actively engage leaders of NATO countries to provide them with a first-hand understanding of the situation on the ground. By demonstrating resilience in the face of an existential threat over the past two years, Ukraine can underscore the fundamental values it shares with the United States, emphasizing the defense of human rights and garnering bipartisan support. Strengthening ties beyond NATO states, such as through dialogue with Global South leaders, may also weaken Russian support outside of the West by utilizing a neocolonial narrative. Additionally, Ukraine should seek postwar security guarantees, ensuring that promises made in exchange for relinquishing nuclear capabilities are honored.

>APPENDIX 1

Analysis of Simulated Decision-Making and Moves

In every round, participants made strategic and operational moves in pursuit of their national goals in the sequence of Russia, the United States, NATO, Ukraine, and ending with a second Russian turn.

In Round 1, Russia began the wargame with a strategic information campaign. This increased anxiety in Poland and neighboring states through threats, anti-immigration rhetoric, and references to Crimea. It sought to exploit divisions within Poland, raise concerns about refugees, and distract Poland from providing reinforcements to NATO. Despite skepticism from the United States and Ukraine on the efficacy of past Russian information campaigns, Russia's strategy was successful. Operationally, Russia bolstered its presence in Ukraine, deploying 40,000 troops primarily to Kherson and Zaporizhzhia. However, the Russian attempt to interrupt NATO supply lines failed.

The United States concentrated on bolstering military support for Ukraine and NATO allies through various strategic and diplomatic measures. This included increasing military and economic aid to Ukraine, diplomatic outreach to global partners, and increased information-sharing. Operationally, the United States successfully trained 40,000 Ukrainian troops, accelerating equipment provision and reinforcements to the Ukrainian front.

NATO focused on enhancing Ukrainian air defense capabilities through diplomatic efforts and military training. While Russia expressed concerns about NATO's actions escalating tensions, NATO proceeded successfully with joint maritime patrols in the Black Sea and a deployment of air forces into Romania.

In light of this increased support from its Western partners, and despite skepticism from Russia, Ukraine successfully mobilized 200,000 troops in western Ukraine and deployed them to Zaporizhzhia. In response to this escalation, Russia successfully intercepted and attacked a military convoy carrying NATO supplies from Poland to Ukraine, without spillover fighting into Poland. Russian failed to decrease NATO support through an information campaign.

Round 2, which began in September 2023, saw developments that reshaped the dynamics of the conflict. Finland's accession to NATO and Russia's closure of the grain corridor in the Black Sea marked notable strategic shifts. Additionally, the demise of Yevgeny Prigozhin and the reduced role of the Wagner group in Ukraine altered the battlefield landscape.

Russia's strategic objectives involved dividing NATO, diminishing US support for Ukraine through more information campaigns, and funding far-right groups and liberal influencers in the United States who questioned the allocation of resources to Ukraine. Operationally, Russia sought to weaken Ukrainian convoys. Despite skepticism from the United States, Russia's information ef-

forts proved highly successful, while its operational maneuvers yielded mixed results.

In light of Russian information successes, the United States focused on regaining domestic support for Ukraine through a strategic information campaign highlighting Russian atrocities and emphasizing attacks on civilians. Despite moderate success in this regard, US operational provision of intelligence support for Ukrainian combat effectiveness was unsuccessful.

NATO concentrated on diplomatic efforts to secure Sweden's NATO accession and increase supplies to Ukraine. After Sweden's formal accession into NATO in fall 2023 (months sooner than Sweden's actual NATO accession timeline), NATO bolstered Ukrainian combat capacity through enhanced supply routes. However, Russia remained skeptical of Sweden's military significance within NATO.

Ukraine pursued an improved economic outlook, securing an invitation to commence European Union accession negotiations, as well as executing a secret operation to sabotage Russian logistics in eastern Ukraine. The resulting economic boost from the EU was successful, and the sabotage operation severely disrupted Russian logistics. Operationally, Ukraine launched a major campaign to move 200,000 troops, push through lightly defended positions, and break the Russian line in Luhansk. While Kyiv was not entirely successful in achieving this goal, the campaign reduced Russian troops in the area.

Russia responded by regrouping its forces and escalating its nuclear rhetoric to global audiences, emphasizing that Ukraine was prolonging the conflict. Operationally, Russia attempted to counter advancing Ukrainian forces with air power, but the counteroffensive failed.

Round 3 began in March 2024. A secret Russian mission attempted to assassinate Zelenskyy; it failed but resulted in his hospitalization. In this round, Russia's strategic objectives centered on military mobilization and information warfare to maintain battlefield dominance and sway global perceptions. Successfully mobilizing 500,000 troops, Russia sought to deter dissent within its borders while securing Chinese logistical support to bolster its military capabilities. Operationally, Russia launched massive air attacks around Luhansk, inflicting significant casualties on Ukrainian forces.

In response to these losses, the United States focused on economic measures to support Ukraine, seizing and releasing frozen Russian assets to Ukraine, while increasing sanctions on Russia. Despite concerns raised by Russia regarding the legality and potential repercussions of these actions, the United States proceeded successfully with the seizure. Operationally, the United States redirected air force units from Europe to the Pacific region, signaling a shift in focus to broader geopolitical concerns and to BRICS's increasing support of Russia.

NATO pursued a two-pronged strategy of economic sanctions and diplomatic outreach to counter Russian aggression. Hosting a conference to develop strategies to combat Chinese economic and political influence, NATO aimed to strengthen its position on the global stage while curtailing Russian influence. Operationally, NATO increased export controls and orchestrated diplomatic engagements to bolster regional security.

Following NATO's support, Ukraine successfully intensified its diplomatic efforts to garner support from individual NATO members and to inform the international community about Russian aggression. Operationally, Ukraine countered the massive Russian mobilization by deploying ground troops in concert with air support to retake Luhansk. The offensive was an overwhelming success, and Ukraine achieved a significant victory in reclaiming Luhansk from Russian forces.

Russia retaliated with ground support to recapture Luhansk, deploying substantial troop reinforcements. Despite inflicting heavy casualties on Ukrainian forces, Russia's efforts fell short of fully retaking the region. Painful battlefield failures turned Russia's focus to preparing for a longer conflict. To bolster its retaliatory operations, Russia began a successful campaign to reduce US and NATO support for Ukraine in the 2024 US presidential election. At the end of the third turn, the United States and NATO shifted focus to the Indo-Pacific region, and developments in the US election hinted at a further shift away from Ukrainian support.

At the end of three rounds spanning March 2023 to September 2024, participants reflected on their moves and postulated strategies for the next two years.

Russia, having experienced setbacks in recent battles, is anticipated to adopt a defensive stance until the outcome of the US election in November 2024. The return of Donald Trump to the White House would likely change the current US approach to the conflict: pressuring Ukraine to negotiate a ceasefire if it does not achieve additional battlefield victories by the end of the year. However, the reelection of President Biden could create enough dissent among the American public to afford Russia an opportunity to resume offensive operations. Despite not fully meeting its victory conditions, Russia received increased support from BRICS nations and notably secured Chinese backing, which remains contingent on certain factors, such as avoiding significant military defeats or nuclear use. Heightened nuclear escalation creates grave concern over Russian tactical nuclear weapon use, even though Russia refrained from nuclear weapon deployment in the simulation.

For the United States, sustaining public support for Ukraine remains pivotal, with battlefield successes by Ukrainian forces expected to bolster bipartisan backing. Despite failing to achieve its goal of reducing nuclear escalation, the United States maintains a strategic interest in curbing further escalation. Concerns persist regarding potential divergence between US and Ukrainian interests, particularly in the face of the 2024 presidential election.

NATO will focus on recalibrating global partnerships and devising a comprehensive Indo-Pacific strategy. It will also renew its emphasis on the Black Sea region in response to developments in the Russia-Ukraine war. The issue of Ukraine's potential NATO membership remains unresolved, with internal disagreements between key members, such as Germany and the United States, hampering progress.

In Ukraine, the wargame mirrors reality, including challenges with military manpower shortages and the uncertainty of US support. Despite this, Ukraine remains fully engaged in the conflict to the last man, actively seeking assistance from European nations and striving to internationalize the conflict to garner more global support. Ukraine's diplomatic and informational efforts to bolster support among international leaders and political audiences contrasts with Russia's comparatively blunt but often effective information campaigns.

> APPENDIX 2

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