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Contentious narratives and disinformation about nuclear weapons in strategic deterrence and competition: A SOF perspective

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Russia's "special military operation" in Ukraine demonstrates the challenge for strategic deterrence and competition of countering contentious narratives and disinformation about weapons of mass destruction (WMD) during conventional regional wars against a nuclear-armed adversary. Moscow uses both tailored, contentious narratives and targeted disinformation about WMD in Ukraine to influence and disrupt local and global perceptions in support of its deterrence and competition objectives vis-à-vis the United States and NATO. Since December 2021, Moscow has made a focal point of chemical, biological, radiological, and nuclear weapons in its efforts to establish a permissive environment for its military build-up on the border with Ukraine and then its military intervention.

These information tactics also demonstrate an opportunity for US Special Operations Forces (SOF). They are a case study for considering how SOF can contribute to strategic deterrence and competition objectives, specifically countering adversary gray-zone information efforts to alter regional security orders.[1] Such a role is in line with the 2022 Special Operations Forces Vision and Strategy, which provides a framework for the evolution of SOF into "a force capable of creating strategic, asymmetric advantages for the nation as a key contributor of integrated deterrence" (United States Special Operations Command, 2022).

This paper briefly examines this strategic challenge and SOF opportunity, focusing narrowly on the distinction between contentious narratives and disinformation about nuclear weapons and the role of SOF in countering these gray-zone information tactics. The nuclear dimension of Moscow's contentious narratives and disinformation in the "special military operation" is of particular interest because it demonstrates the distinction between strategic efforts to

[1] For a thoughtful discussion about the roles SOF can play in supporting US strategic deterrence objectives, see: Roberts 2021.

influence and *disrupt* local and global perceptions in Moscow's favor. This distinction between influence and disruption is less clear with Russia's contentious narratives and disinformation about chemical and biological weapons in Ukraine, as disinformation about these two types of WMD appears to overwhelm contentious narratives. We believe this distinction is useful for policymakers and warfighters responsible for countering gray-zone information tactics because it provides a framework for crafting tailored responses to contentious narratives and disinformation about nuclear weapons and other WMD. The chapter concludes with a discussion of efforts that could be undertaken by SOF in cooperation with other relevant stakeholders to address this aspect of adversary gray-zone information tactics.

A conceptual framework for identifying contentious narratives and disinformation

Our analysis makes a distinction between contentious narratives intended to influence US strategic deterrence and nonproliferation policies, and overt and covert disinformation intended to disrupt those policies (See Figure 1 for a graphical representation of the difference between influence and disruption). Under this framework, contentious narratives do not qualify as disinformation unless they were articulated and used for the purpose of bluntly undermining declared US policies. Put differently, we make a distinction between subjective and differing yet plausible threat perceptions and strategies, and objectively false and malicious information. The former informs contentious narratives that are considered within the normative bounds of diplomacy, deterrence, and competition. The latter constitutes disinformation, which is outside the normative bounds of these traditional processes of statecraft, at least for democratic governments. Both approaches have deep roots in the Russian theory and practice of information confrontation (*informatsionnoye protivoborstvo*, or *IPb*) (Defense Intelligence Agency, 2017, p. 37).

Table 1: Ends-ways-means framework for understanding the difference between influence and disruption. According to this framework, disruption is a subset of influence, and influence is not always disruption.

Ends	Ways	Means
Influence	Contentious narratives (benign or malicious)	Diplomacy, competition, deterrence
Disruption	Disinformation (malicious)	Information warfare

This conceptual framework is useful for understanding adversary threat perceptions and can help policymakers and warfighters craft tailored responses to adversary influence and disruption efforts. Russian gray-zone information tactics in the "special military operation" in Ukraine are an illustrative case study.

Analyzing Russian claims about Ukrainian nuclear weapon ambitions

Analysis of Russian claims about Ukrainian nuclear weapon ambitions using our conceptual framework leads to three key judgements:

1. Russia employs a mix of contentious narratives and disinformation about Ukrainian nuclear weapon ambitions across the global information ecosystem and the local Russian-language information ecosystem.
2. Russian claims appear to be tailored to each information ecosystem despite eventual overlap as the claims proliferate, suggesting that Moscow may have different strategic objectives for each audience. While Moscow appears to target global and local audiences with contentious narratives about Ukrainian nuclear ambitions to influence perceptions in Moscow's favor, Moscow appears to target local Russian-speaking populations with overt and covert disinformation to disrupt anti-war narratives (Watts, 2021).
3. High-level Russian officials appear to refrain from proliferating at the global level the same nuclear disinformation that is promoted in the local Russian-language information ecosystem. This starkly contrasts with high-level Russian statements about other WMD in Ukraine, most notably biological weapons.

Contentious narratives about Ukrainian nuclear weapon ambitions preceded the "special military operation," emerging on 21 February 2022 at the highest political level from President Putin (Putin, 2022a) and Defense Minister Shoigu (Shoigu, 2022) in response to remarks made by President Zelensky at the Munich Security Conference on 19 February 2022. In his speech, Zelensky stated that "Ukraine will have every right to believe that the Budapest Memorandum is not working and all the package decisions of 1994 are in doubt" if consultations within the framework of the Memorandum do not happen or do not result in improvements in Ukraine's security environment (Zelensky, 2022).[2] Moscow seized this part of the statement and immediately made it a focal point in its narrative about cooperation between NATO and Ukraine. Moscow claims that the statement revealed Kiev's nuclear weapon ambitions, and it emphasizes that a nuclear-armed Ukraine would be unacceptable for Russian security. It appears that Moscow uses this contentious narrative about Ukrainian nuclear ambitions to influence global and local perceptions and cultivate a permissive environment for the "special military operation."

Two hypotheses could explain Russian motivations for this contentious narrative about nuclear weapons. First, this contentious narrative might represent genuine threat perceptions and therefore would fall within the realm of *strategic deterrence and stability signaling*. Moscow could believe that Kiev desires to acquire nuclear weapons and that it is in a position to do so, especially if it has the backing of the United States and NATO. A Ukraine with an

[2] The Budapest Memorandum on Security Assurances of 1994 provided Ukraine, Belarus, and Kazakhstan security assurances from Russia, the United States, and United Kingdom when the three former Soviet Republics joined the NPT as Non-Nuclear Weapon States (NNWS).

independent nuclear force or under the protection of US or NATO extended nuclear deterrence guarantees appears to be a genuine threat perception, judging by the content and quantity of public statements from high-level Russian officials, although technical analysis casts severe doubt on the idea of an indigenous Ukrainian nuclear weapons capability.[3] Nevertheless, President Putin repeated the narrative in his address to the nation that marked the start of the "special military operation" on 24 February (Putin, 2022b), and he has continued to repeat this narrative throughout the operation, expressing anxiety about perceived Transatlantic support for (or lack of Transatlantic criticism of) Zelensky's remarks in Munich (Putin, 2022c).

This narrative is tied to Moscow's perception that the United States and NATO, backed by nuclear weapons, are using Ukraine as a foothold for aggression against Russia. Moscow sees Western support for Kiev as a direct threat to Russian security. If this threat perception about Ukrainian nuclear ambitions is genuine, then the implications for possible Russian actions to prevent such a scenario suggest a greater willingness to escalate the conflict. Additionally, Moscow may assess that this confusing rhetoric about Ukrainian nuclear weapon ambitions, in combination with its own explicit nuclear signaling, conveys its high stake in the conflict and enhances its deterrence posture vis-à-vis the United States and NATO.

A second hypothesis is that this narrative about Ukrainian nuclear weapons ambitions does not represent genuine threat perceptions but falls into the realms of contentious *diplomacy and strategic competition.* Under this scenario, the narrative is an opportunistic and convenient focal point for the "special military operation" that emerged in response to the remarks made by President Zelensky in Munich. Creating confusion and anxiety about Moscow's nuclear rhetoric might also create a permissive environment for conflict escalation, possibly even laying the groundwork for Moscow to use nuclear, chemical, or biological weapons. From this perspective, Moscow is "flooding the zone" with influence operations that do not necessarily reflect actual threat perceptions but are seen as advantageous to its military efforts.

Starting on 03 March, the SVR and Russian state media began supplementing contentious narratives about Ukrainian nuclear ambitions with overt and covert disinformation about Ukrainian nuclear capabilities and facilities. On 03 March, the head of the SVR, Sergei Naryshkin, announced that the SVR had evidence that Ukraine was developing nuclear weapons, and that the United States knew about this but did nothing to stop Ukraine (RIA Novosti, 2022a). On 04 March, the scientific community at the Kurchatov Institute[4] issued a statement in support of the "special military operation," recognizing, among other things, the "danger of new types of weapons that are being developed in laboratories bordering Russia" (Kurchatov Institute, 2022). While this statement appears to fall within the realm of nuclear

[3] An indigenous nuclear weapon program would require Ukraine to acquire highly enriched uranium or plutonium, presumably diverted from its civil nuclear power program, which is under full scope safeguards by the IAEA in accordance with Ukraine's obligations as a NNWS under the NPT.

[4] The Kurchatov Institute played a foundational role in the development of the Soviet nuclear weapons program.

influence, Russian state media refers to it in the context of nuclear, chemical, and biological disinformation about Ukraine. On 06 March, an unnamed "representative of an authoritative Russian government agency" told RIA Novosti that Kiev was using the Chernobyl Exclusion Zone to make dirty bombs and nuclear weapons, intentionally blurring the distinction between nuclear weapons and radiological devices (RIA Novosti, 2022b).

This stream of nuclear disinformation appears to have originated in the Russian information ecosystem several days after the contentious narrative about Ukraine's nuclear weapon ambitions and at lower levels of government through the SVR and Russian-language news outlets and talk shows, suggesting that Moscow may be targeting Russian-speaking populations in Russia and Ukraine with disinformation. Moscow may be using disruptive *disinformation* to *reactively shape public opinion* away from supporting the pro-Western regime in Kiev and shift the focal point in discussions about responsibility for the nuclear safety and security concerns stemming from military activity at Ukrainian nuclear facilities (International Atomic Energy Agency, n.d.).

While the line between these contentious narratives and disinformation about Ukrainian nuclear ambitions may be blurry, the distinction can help guide US policy responses. This analysis suggests that the United States should exercise restraint when responding to contentious narratives that reflect Russia's genuine threat perceptions and instead seek to shape Russian behavior and degrade Russian resolve with other explicit and tacit means of deterrence.[5] This analysis also suggests that the United States should compete for narrative dominance in response to opportunistic narratives and disinformation, as neither reflect genuine threat perceptions.[6]

A role for USSOCOM in addressing contentious narratives and disinformation about WMD

This analysis has implications for USSOCOM. Contentious narratives and disinformation about nuclear weapons and nuclear safety and security in Ukraine are not confined to Russia and Ukraine but flow into NATO countries and beyond, where concerns and confusion about nuclear issues can affect efforts to support Ukraine and reinforce allied deterrence and defense. Longstanding USSOCOM support for US allies could become the target of Russian disinformation, as has been the case for Defense Threat Reduction Agency support for public health research laboratories in Ukraine and across the post-Soviet space (Defense Threat Reduction Agency, n.d.). Contentious narratives and disinformation aimed at joint training of NATO and partner SOF forces, emergency preparedness exercises, or chemical, biological, radiological, and nuclear (CBRN) training could create confusion and controversy about SOF activities in Europe and beyond.

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[5] For a discussion of explicit and tacit means of deterrence, see Schelling (1960), pp. 5, 21, 54.

[6] For a discussion about the potential objectives of strategic competition, see: Durkalec et al., 2018.

We have explored a wide range of possible SOF roles in the digital domain in a volume written for USSOCOM entitled *Strategic Latency Unleashed: The Role of Technology in a Revisionist Global Order and the Implications for Special Operations Forces* (Davis et al., 2021). Several chapters offer operational concepts for SOF to integrate a broad variety of cyber and social media tools into USSOCOM practice. In this paper, we focus on the specific challenge of supporting US strategic deterrence and competition objectives by countering contentious narratives and disinformation that target US nuclear policies and cooperative CBRN threat reduction support systems.

As the lead coordinator for counter-proliferation and owner of psychological operations (PSYOP) forces (United States Special Operations Command, n.d.), USSOCOM is uniquely positioned to both counter WMD and conduct influence operations on behalf of the USG (Lin & Wyman, 2021). SOF are regularly positioned around the world, alongside US diplomats, often in austere, high-risk locations. SOF are also enabled to conduct CONUS-based operational support (CBOS) (1st Special Forces Command – Airborne, 2021) meaning that SOF physically located in the United States can execute digital influence missions and global operations in the information environment with the right authorities, permissions, and as directed (United States Department of Defense, 2016). Such missions could highlight the contributions of cooperative threat reduction and international nonproliferation institutions such as the IAEA and Organisation for the Prohibition of Chemical Weapons (OPCW) to global security. Positive narratives could proactively inform and influence public perceptions on a wide range of nuclear safety and security topics. Nuclear, chemical, and biological themes could document the dangers of conducting military operations at nuclear installations and the risks of using or threatening to use WMD. Specialized efforts could extend the influence of these narratives to reach a broad array of non-English speaking audiences. Country teams are adept at crafting appropriate narratives and targeting local media outlets.

USSOCOM could pursue three lines of effort. First, expand and normalize CBOS in support of global multi-domain operations by standing up an Information Warfare Task Force on Weapons of Mass Destruction (IWTF-WMD) that reports to the Principal Information Operations Advisor (U.S. House Committee on Armed Services, 2021). This task force could be positioned at Fort Bragg, North Carolina, which provides direct access to global PSYOP experts within the 4th and 8th PSYOP Groups who can rotate in and out of these missions, and it could be led by senior PSYOP and Army Nuclear and Counterproliferation officers. The IWTF-WMD could be modeled on the Theater Special Operations Commands that serve as one-stop shopping for regional commands to access and coordinate with USSOCOM. This concept would allow the highest priority issues to be addressed quickly without delaying or restricting operations at the strategic level.

Second, establish a mechanism within the IWTF-WMD for quickly coordinating with other entities that have equities in supporting US deterrence and competition objectives by countering contentious narratives and disinformation about WMD. The list of entities should include USSTRATCOM and USCYBERCOM (Lin & Wyman, 2021, p. 349); stakeholders across

the US interagency, such as the State Department and the National Nuclear Security Administration; and other relevant allied and partner stakeholders. This coordination mechanism could facilitate a more unified, proactive, and timely response to contentious narratives and disinformation in peacetime, crisis, and war.

Third, direct the IWTF-WMD to conduct information campaigns to counter contentious narratives and disinformation about WMD in coordination with WMD subject matter experts. For example, USSOCOM could use the IWTF-WMD to do the following:

1. Develop and disseminate factual information about US and allied WMD policies as well as competitive counter-narratives that expose and counter disinformation (Lin & Wyman, 2021, p. 346).
2. Use AI/ML technology to inform counter-narrative development and dissemination by proactively sampling, binning, and analyzing contentious narratives and disinformation about WMD (Scharre, 2021). This should entail efforts to determine, track, and measure the impact of adversary targeting and messaging.
3. Identify key and central influencers within the relevant information ecosystems and scale their online social networks to increase the size of accessible audiences, while targeting to increase or reduce dissemination as appropriate (Mislove et al., 2007; Lin & Wyman, 2021, p. 347).

Conclusion

Countering gray-zone information warfare tactics involving contentious claims about WMD in conventional regional wars with a nuclear-armed adversary is a new challenge for US strategic deterrence and competition objectives. Efforts to counter these tactics benefit from an analytical framework that distinguishes between contentious narratives and disinformation. This analytical framework suggests that the United States can develop flexible and tailored responses. USSOCOM can play a role in this process by creating synergies between its PSYOP and counter-proliferation missions and coordinating with relevant stakeholders across the USG.

References

Davis, Z.; Gac, F.; Rager, C.; Reiner, P.; & Snow, J. (2021). *Strategic latency unleashed: The role of technology in a revisionist global order and the implications for special operations forces.* Lawrence Livermore National Laboratory. https://cgsr.llnl.gov/content/assets/docs/StratLatUnONLINE.pdf

Defense Intelligence Agency. (2017). *Russia military power report.* https://www.dia.mil/Portals/110/Images/News/Military_Powers_Publications/Russia_Military_Power_Report_2017.pdf

Defense Threat Reduction Agency. (2022, April 11). *Disinformation aimed at DTRA* [Press Release]. https://www.dtra.mil/News/Countering-Disinformation/

Durkalec, J., Gasser, P., & Shykov, O. (2018, November 13-14). *Multi-domain strategic competition: Rewards and risks.* 5th Annual LLNL Deterrence Workshop. United States. https://cgsr.llnl.gov/content/assets/docs/Deterrence_Workshop_Summary_Final2018.pdf

International Atomic Energy Agency. (n.d.). *Nuclear safety and security in Ukraine.* https://www.iaea.org/nuclear-safety-and-security-in-ukraine

Lin, H., & Wyman, T. (2021). Special operations forces and cyber-enabled influence operations. In Z. Davis, F. Gac, C. Rager, P. Reiner, & J. Snow (Eds.), *Strategic Latency Unleashed: The Role of Technology in a Revisionist Global Order and the Implications for Special Operations Forces* (pp. 333-351). Lawrence Livermore National Laboratory. https://cgsr.llnl.gov/content/assets/docs/StratLatUnONLINE.pdf

Mamontov, A. (2022, January 22). *The Andromeda strain. Documentary by Arkady Mamontov* [Video]. YouTube. https://m.youtube.com/watch?v=pA0JRyxH1GM

Mislove, A., Marcon, M., Gummadi, K. P., Druschel, P., & Bhattacharjee, B. (October 2007). *Measurement and analysis of online social networks*. Proceedings of the 7th ACM SIGCOMM Conference on Internet Measurement. New York, NY, United States.

Putin, V. (2022, February 22). *Presidential address*. President of Russia. http://kremlin.ru/events/president/news/67843

Putin, V. (2022a, February 21). *Presidential address*. President of Russia. http://kremlin.ru/events/president/news/67828

Putin, V. (2022b, February 24). *Presidential address*. President of Russia. http://kremlin.ru/events/president/news/67843

Putin, V. (2022c, March 5). *Meeting with flight crew representatives of Russian airlines.* President of Russia. http://kremlin.ru/events/president/news/67913

RIA Novosti. (2022a, March 3). Naryshkin announces SVR has proof that Ukraine was developing nuclear weapons. https://ria.ru/20220303/oruzhie-1776346303.html

RIA Novosti. (2022b, March 6). Source reveals Ukraine's motivations for using the Chernobyl NPP. https://ria.ru/20220306/chaes-1776880399.html.

Roberts, B. (2021). Special forces and strategic deterrence. In Z. Davis, F. Gac, C. Rager, P. Reiner, & J. Snow (Eds.), *Strategic Latency Unleashed: The Role of Technology in a Revisionist Global Order and the Implications for Special Operations Forces,* (pp. 51-60). Lawrence Livermore National Laboratory, https://cgsr.llnl.gov/content/assets/docs/StratLatUnONLINE.pdf.

Scharre, P. (2021). Artificial intelligence: Risks and opportunities for SOF. In Z. Davis, F. Gac, C. Rager, P. Reiner, & J. Snow (Eds.), *Strategic Latency Unleashed: The Role of Technology in a Revisionist Global Order and the Implications for Special Operations Forces* (pp. 333-351). Lawrence Livermore National Laboratory. https://cgsr.llnl.gov/content/assets/docs/StratLatUnONLINE.pdf

Schelling, T. (1960). *The strategy of conflict.* Cambridge, MA: Harvard University Press.

Staff of the Kurchatov Institute National Research Center. (2022, March 4). *For scientists of Russia.*

Kurchatov Institute. http://nrcki.ru/product/press-nrcki/press-nrcki--44871.shtml?g_show=43519

Shoigu, S. (2021, December 21). *Expanded meeting of the defence ministry board*. President of Russia.
http://en.kremlin.ru/events/president/news/67402
Shoigu, S. (2022, February 21). *Security council meeting.* President of Russia.
http://kremlin.ru/events/president/news/67825
U.S. House Committee on Armed Services. (2021). *National Defense Authorization Act for Fiscal Year 2022: Report of the Committee on Armed Services, House of Representatives on H.R. 4350 together with additional and dissenting views.* https://www.govinfo.gov/content/pkg/CRPT-117hrpt118/html/CRPT-117hrpt118.htm
United States Department of Defense. (2016). *Strategy for operations in the information environment.* https://dod.defense.gov/Portals/1/Documents/pubs/DoD-Strategy-for-Operations-in-the-IE-Signed-20160613.pdf
United States Special Operations Command. (2022). *Special Operations Forces vision & strategy.* https://www.socom.mil/sof-vision-and-strategy
United States Special Operations Command. (n.d.). *Core activities.* https://www.socom.mil/about/core-activities
Watts, C. (2021. April 28). Russia's disinformation ecosystem. *Homeland Security Today*. 28.
https://www.hstoday.us/subject-matter-areas/infrastructure-security/russias-disinformation-ecosystem-a-snapshot/
Zelensky, V. (2022, February 19). Full speech at 2022 Munich Security Conference. *The Kyiv Independent.* https://kyivindependent.com/national/zelenskys-full-speech-at-munich-security-conference/
1st Special Forces Command – Airborne. (2021). *A vision for 2021 and beyond.*
https://www.soc.mil/USASFC/Documents/1sfc-vision-2021-beyond.pdf