Using Open-Source Intelligence to Improve Readiness

By Lieutenant Colonel Michael P. Carvelli

The U.S. *National Security Strategy* states, "Russia now poses an immediate and persistent threat to international peace and stability,"[1] and this claim is further reinforced in the *2022 National Defense Strategy of the United States of America*, which states, ". . . Russia's government seeks to use force to impose border changes . . .."[2] The second Russian invasion of Ukraine, on 24 February 2022, serves as a case study on the use of obstacles in countermobility operations as Russia attempts to consolidate gains in Ukraine. This case study provides an opportunity to improve military readiness through the use of open-source intelligence (OSINT) in the integration of adversary techniques.

Intelligence staff officers and noncommissioned officers can assist commanders and training officers in focusing training objectives through the use of OSINT, which refers to "relevant information derived from the systematic collection, processing, and analysis of publicly available information in response to known or anticipated intelligence requirements."[3] Potential sources of publicly available information include national media articles and social media platforms such as Twitter© and Facebook©. Without accessing classified systems, intelligence staffs at home station can systematically collect and analyze these sources to provide relevant adversary tactics, techniques, and procedures (TTP) for focused training objectives.

The use of OSINT and its dissemination to commanders and training officers provide opportunities to add to or update existing standard operating procedures (SOPs) since existing SOPs may not necessarily account for adversary TTP currently in use and may be outdated or fail to accurately reflect required time and resources. Integrating OSINT into home station training allows commanders to include relevant training objectives, update SOPs, and improve readiness.

Intelligence staffs at home station are often not as busy as they would be if they were deployed in support of operations or participating in combat training center rotations. The integration of OSINT into staff routines, including command and staff or training/operations meetings, improves the competence of the intelligence staff outside of deployments, combat, or high-operational training environments. For example, starting training meetings with an unclassified update derived from OSINT enables commanders to increase the relevance of the training. At the battalion level, the battalion intelligence officer and noncommissioned officer should lead the updates. To enhance the effectiveness of company level training meetings and ensure focus for home station training, enlisted intelligence analysts should provide updates for two reasons. First, more detailed analyses can help shape company mission-essential task training to maintain company level readiness. For example, brigade engineer battalion intelligence staffs can help shape training objectives for engineer; signal; military intelligence; chemical, biological, radiological, and nuclear; and sustainment formations in their battalions. Second, this approach creates a payback loop in which enlisted intelligence analysts improve their competence and capability in collecting, analyzing, and disseminating information on a routine basis instead of just during the normalized surges of combat training center rotations and deployments. Practicing the operations process, including the integration of OSINT, increases the readiness of staffs and hones skills that can atrophy.

Russia's second invasion of Ukraine serves as a case study for improving OSINT integration at home stations. With specific reference to engineer mobility training, Russia has been installing dragon's teeth—pyramidal concrete blocks designed to slow advancing vehicles—in Ukraine.[4] According to a Twitter post from the United Kingdom Ministry of Defence, Russia was in the process of preparing a defense in depth behind its front line in November 2022, likely attempting to forestall rapid Ukrainian advances.[5] This tweet was corroborated by another post, which included geolocation information showing the obstacle belt of trenches and dragon's teeth.[6] Using OSINT to describe Russian countermobility operations provides relevant, realistic opportunities to focus U.S. Army mobility training and update unit SOPs.

The use of dragon's teeth obstacles for training would provide several opportunities to hone valuable skills at home station. First, protective obstacles—specifically, concrete barriers—are mentioned a few times in Field Manual (FM) 3-34, *Engineer Operations*, but the manual does not provide much insight into their employment;[7] therefore, engineer companies could replicate these obstacles, enabling their own training on countermobility-related mission-essential

tasks. Practicing the employment of dragon's teeth would help leaders become familiar with the time and resources required to create, move, and use them. Second, once constructed and emplaced, engineer companies could devise ways to breach these obstacles. Mechanical and explosive breaching methods could be used to reduce the obstacles, and engineer heavy equipment, including bulldozers, dump trucks, and bucket loaders, could be used to move or fill in the obstacles to create breach lanes; SOPS could then be created or updated. Last, leaders could capture information about the time and resources required and provide commanders with updated staff estimates for these operations.

Dragon's tooth concrete barriers

It is dangerous for us to assume that our adversaries will use obstacles described in U.S. military doctrine (for example, triple-strand concertina wire to train mobility tasks); instead, leaders need to correlate enemy doctrinal templates with relevant obstacles used by our adversaries. Maintaining focus on adversary methods will ensure that units are training on relevant objectives. OSINT can help provide adversary TTP.

Commanders must use time and resources available to meet required training objectives and maintain readiness. Army doctrine cannot possibly include every scenario and type of obstacle that engineer units could encounter in a combat environment. Integrating OSINT into routine training events ranging from weekly training meetings to combat training center rotations enables intelligence professionals to improve tactical and technical capabilities—and vice versa. The use of open sources to shape training events increases readiness and provides relevant, adversary-focused objectives.

Endnotes:

[1]*National Security Strategy*, The White House, Washington, D. C., 2022, p. 25, <https://www.whitehouse.gov/wp-content/uploads/2022/10/Biden-Harris-Administrations-National-Security-Strategy-10.2022.pdf>, accessed on 5 January 2023.

[2]*2022 National Defense Strategy of the United States of America*, U.S. Department of Defense, Washington, D. C., 27 October 2022, p. 5, <https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF>, accessed on 3 January 2023.

[3]FM 1-02.1, *Operational Terms*, 3 March 2021, p. 1-73.

[4]Peter Beaumont, "Russia Installs 'Dragon's Teeth' Barriers to Slow Advance of Ukrainian Forces," *The Guardian*, Guardian News and Media, 8 November 2022, <https://www.theguardian.com/world/2022/nov/08/russia-installs-dragons-teeth-blocks-in-shift-to-more-defensive-warfare>, accessed on 4 January 2023.

[5]"Latest Defence Intelligence Update on the Situation in Ukraine," Twitter, United Kingdom Ministry of Defence (@DefenceHQ), 15 November 2022, <https://twitter.com/DefenceHQ/status/1592402834578083840>, accessed on 3 January 2023.

[6]"Russians Also Seem To Have Built a New Set Of Dragon's Teeth/Vehicle Trenches Around Novoivanivka," Twitter, Rollo (@rollowastaken), <https://twitter.com/rollowastaken/status/1592183458918699010>, accessed on 5 January 2023.

[7]FM 3-34, *Engineer Operations*, 18 December 2020, p. 2-15.

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