The Wagner Groupâ??s Use of Chinese Space Intelligence

Description

Editorâ??s note: This article is part of Project Air & Space Power, which explores and advocates for the totality of air, aviation, and space power in irregular, hybrid, and gray-zone environments. We invite you to contribute to the discussion, explore the difficult questions, and help influence the future of air and space power. Please contact us if you would like to propose an article, podcast, or event.

The war in Ukraine has shattered expectations about how modern conflicts unfold. It has emerged as a technological patchworkâ??a theater where Cold War relics like the T-54 tank operate alongside modern systems like the British Challenger 2s. Soviet-era PM M1910 machine guns share the battlefield with unmanned aerial vehicles (UAVs), while 1940s artillery coexists with advanced air defense systems. Amid this blend of old and new, the Wagner Groupâ??a shadowy Russian mercenary organizationâ??represents the unexpected convergence of antiquated weaponry and cutting-edge satellite intelligence.

Wagnerâ??s ability to leverage Chinese-sourced satellite data highlights a disturbing reality: even non-state actors now possess access to space-based intelligence once available only to powerful nations. This democratization of space technology has expanded the capabilities of rogue actors, raising profound implications for global security. It also puts the space domain at the forefront of contemporary warfare and the Russia-Ukraine conflict.

The lessons from this unprecedented instance of two-sided space warfare are plentiful, but three key points stand out. First, the operational and tactical significance of using space assets in modern conflict has reached a critical threshold, directly shaping outcomes on the battlefield. Second, access to transformative satellite data no longer necessitates owning satellites, as commercial and third-party providers have lowered the entry barrier. Third, even non-state actors can now exploit these capabilities, demonstrating the growing democratization of space technology and its far-reaching implications for global security.

The Wagner Group and Space

The Wagner Group is an infamous quasi-non-state actor that requires no further introduction. Yet few have heard of Nika-Fruit, a company that was supposedly a grocery trading business. Interestingly

enough, this establishment was part of former Wagner Group leader Yevgeniy Prigozhinâ??s commercial empire. In this capacity, Nika-Fruit CEO Ivan Mechetin, Prigozhinâ??s associate, signed a contract in November 2022 with Beijing Yunze Technology Co. Ltd. to acquire two high-resolution observation satellites operated by the Chinese space giant Chang Guang Satellite Technology (CGST). A deal which must have earned the stamp of approval of the political elites in Beijing since no dual-use business runs without the Communist Partyâ??s supervision or patronage. As the satellite imagery acquisition obtained by the Wagner Group demonstrated, not only did they watch the fruit fields, but they also were tasked to monitor the battlefields of Ukraine, Libya, Sudan, the Central African Republic, and Mali. Furthermore, by the end of May 2023, Wagner forces became very interested in the Russian army HQ in Rostov-on-Don and the routes leading to Moscow. Already in bed with the Chinese and their dual-use technology, the Kremlin proxy was planning a coup.

Intelligence, surveillance, and reconnaissance (ISR) rely heavily on various types of satellites flying thousands of miles above the Earth to support contemporary battlefield decisions. Earth observation satellites, including synthetic aperture radar (SAR) satellites, provide surveillance and reconnaissance; navigational constellations, like GPS, provide not only drone and ground navigation but also target acquisition and weapon guidance systems; and communication satellites provide a means to communicate via a highly reliable redundant communication path by directly accessing satellites. In addition, non-encrypted GNSS services, i.e., global navigation, are free for all, and commercial satellite communication is accessible to practically everybody.

The second point refers to the fact that, for example, Ukraine currently has zero satellites in orbit. Yet, thanks to the assistance of the allied states and private satellite companies, it has access to data from a few dozen Earth observation satellites and the ability to communicate with the Starlink constellation. Due to the democratization of space technologies and services, capabilities and data once reserved for space powers are, in todayâ??s market, available to practically everybody with enough cash, including rogue states, terrorist groups, and private military companies (PMC). This was the case with the Wagner Group, which purchased ISR satellite data (satellite imagery products) from China and used it for combat and other military purposes. The most famous example happened just over a year ago when they attempted a coup dâ??Ã©tat in Russia. Much of the initial success of the rebellion could be attributed to having access to and relying on satellite reconnaissance data.

The Wagner Group: From a Kremlin-run Agent to a Rogue Proxy back to State Control

The Wagner Group operated under the shadowy influence of the Kremlin, particularly through Russian intelligence services and the Ministry of Defense (MoD). Initially, the group served as a tool for

Russiaâ??s foreign policy, providing Moscow with plausible deniability in various foreign operations. The Wagner Groupâ??s paramilitary wing, most associated with its mercenary activities, played a crucial role in conflicts in Ukraine, Syria, and across Africa. In Ukraine, the group shifted tactics by using convicts as unskilled fighters, a stark contrast to its more elite overseas operations. The Wagner Group should be viewed as a brand name for the entire network of Kremlin-dependent Prigozhin-related entities rather than a singular, private military company, as it pictured itself. Ultimately, the Wagner Group was never a private entity but a deniable extension of Russiaâ??s GRU, functioning as a hybrid proxy for the Kremlinâ??s interests.

By late May 2023, the Russians, with significant help from the Wagner Groupâ??largely comprised of freed convicts (around 70 percent)â??secured victory in the battle of Bakhmut. Wagner paid a heavy price, losing an estimated 19,547 personnel, of whom 17,175 were prisoners. Russiaâ??s overall losses ranged between 32,000 and 43,000 killed. Wagnerâ??s role and high casualty rate bolstered Prigozhinâ??s influence and ambitions.

To curb Wagnerâ??s growing power, on June 10, 2023, the Russian MoD ordered Wagner troops to sign contracts with the Russian Army, aiming to bring them under MoD control, a move Prigozhin and his soldiers largely rejected. Around this time, Wagner began amassing forces near the Russian border, possibly preparing for rebellion.

On June 23, 2023, Prigozhin accused Russian authorities of false motives behind the 2022 invasion of Ukraine, declared war on the MoD, and initiated a â??March for Justiceâ?• towards Moscow, which was nothing less than an open revolt. Despite initial successes, including the downing of several Russian aircraft, the rebellion ended abruptly on June 24 when Prigozhin halted his forces just 125 miles from Moscow. The short-lived uprising concluded with Prigozhin and his fighters seeking refuge in Belarus.

Chinese Assistance from Space

What stands out in the Wagner revolt is its ability to acquire and successfully operationalize satellite imagery from Chinese ISR satellites. Interestingly, by securing access in February 2022 to Chinese private reconnaissance satellites (although it should be stressed that in China, nothing of strategic importance is truly privately owned), Wagner obtained the ability to leverage space imagery for operations in Africa and Ukraine. However, at some point in spring 2023, the Wagner Group ordered imagery of the headquarters of Russian operations for Ukraine in Rostov-on-Don, the city Wagner seized in the mutiny, and other towns en route to Moscow. This makes for interesting bedfellows as China has silently supported Russia in its invasion of Ukraine.

In January 2023, the US Treasury imposed sanctions on Joint Stock Company Terra Tech (Terra Tech), a Russian technology company that sourced space imagery from commercial satellites and aerial images from unmanned systems. Terra Tech obtained ISR satellite images of Ukraine from Spacety China (Changsha Tianyi Space Science and Technology Research Institute Co. LTD) and its Luxembourg-based subsidiary. Spacety China, a pioneering private space company and a key producer of Chinese SAR imagery, provided the data to bolster Wagnerâ??s combat operations in Ukraine.

However, Prigozhin denied the purchase in a statement in March 2023, claiming that Wagner had almost 20 Earth observation satellites, including SAR, for a year and a half. This, he argued, eliminated the need to acquire satellite images from external sources. Similarly, Spacety also distanced itself from any association with the Wagner Group.

Verifying Prigozhinâ??s claim of having close to 20 satellites in 2023 is difficult. We can only speculate that it is quite possible that the Wagner Group had access to Russian and Chinese Earth observation satellites, alongside all the other resources provided by Russiaâ??s military and intelligence community. However, at the beginning of the full-scale war in Ukraine, the Russiansâ?? space sensory assets were quite limited in number and quality â?? they had 19 military and dual-use optical and SAR satellites, with only some at the proper orbital inclination to provide data on Ukrainian territory. Russia subsequently launched more earth observation satellites, but undoubtedly, the Russian MoD and the Wagner Group needed more ISR satellite data than they had direct access to, thereby needing to make additional purchases.

Wagner paid Nika-Fruit over $30 million (235 million yuan) for two high-resolution earth observation satellites already in orbit. This included the Jilin-1 Gaofen 03D 12 and Jilin-1 Gaofen 03D 13 ISR satellites and additional services, namely on-demand tasking (probably provided by other satellites from the Jilin-1 Gaofen constellation). These satellites offer high-resolution panchromatic and multispectral imagery capable of capturing detailed images of the Earthâ??s surface, which are invaluable for military reconnaissance and strategic planning.

The photos of the contract are displayed below:

Wagner
Wagner

Source: Nothing to see @WagnersFamily, 6 Oct 2023, via Twitter

Wagner
Wagner

Source: Nothing to see @WagnersFamily, 6 Oct 2023, via Twitter

Wagner
Wagner

Source: Nothing to see @WagnersFamily, 6 Oct 2023, via Twitter

The first satellites of the constellation were launched in October 2015. Originally envisioning a 138-satellite constellation, the program was updated to 300 satellites to be operational by 2025. Jilin-1 Gaofen was designed for various remote sensing applications, including agriculture, forestry, environmental monitoring, and disaster management. They were launched on the Long March 8 rocket on February 27, 2022, and placed on a 535 km altitude sun-synchronous circular, north-to-south orbit, with an orbital period of 95 minutes and a 97.6Â° inclination. Swath width exceeds 17 km, and the image resolution, according to the manufacturer, is better than 0.75 m.

The constellation offers high revisit rates, meaning it can frequently capture images of the same area, essential for monitoring dynamic and rapidly changing environments. The photo below depicts a test of the constellationâ??s nine satellites, which took pictures of the Abu Dhabi International Airport within 10 minutes. It exemplifies the detail of the imagery that the Wagner Group was obtaining from the Chinese satellite company.

Wagner
Wagner

Source: eoPortal. (2024, February 28). *Jilin Constellation*. European Space Agency. https://www.eoportal.org/satellite-missions/jilin-con#eop-quick-facts-section

According to the US Treasury Department, the satellites the Wagner Group purchased were used for ISR in Ukraine. The Wagner satellites enhanced the groupâ??s ability to monitor vast and remote areas, track the movements of their adversaries, and safeguard their interests and personnel. The observation satellites provided a significant tactical advantage in austere environments where ground-based ISR was limited or unreliable.

Prigozhin and the Wagner Group also used satellite intelligence data against the Russian Federation authorities. The â??March for Justiceâ?• of June 23, 2023, was well prepared. Although the contract with Beijing Yunze Technology did not include the coverage of Russian territory, it ordered and received these images. They included ISR data of the route from Bakhmut to Rostov-on-Don and Moscow. As AFP reports, the satellite images obtained by Wagner covered critical military and strategic sites, including the headquarters in Rostov-on-Don, other towns along the route to Moscow,

and locations of military interest such as Grozny, the stronghold of pro-Kremlin Chechen leader Ramzan Kadyrov. Rostov-on-Don was likely captured so swiftly partially because of good intelligence.

Furthermore, it is highly unlikely that such a contract and product delivery would be possible without at least a silent nod from the Chinese authorities. In the authoritarian state the party closely monitors research, development, and operations of all dual-use technologies, it would be naive to consider Beijing oblivious at least to the existence of the â??Wagner satelliteâ?• contract.

Conclusion

The evolution of the Wagner Group from a Kremlin-controlled proxy to a rogue actor underscores the alarming ability of such entities to independently acquire and operationalize technologies once reserved for powerful states. The democratization of cutting-edge technology, exemplified by the Wagner group procurement and use of earth observation data, invalidates the assumption that only states possess the means to access or utilize space assets for military means. State proxies, hybrid actors, and non-state actors are increasingly empowered in this arena. As a result, the landscape of operational, tactical, and strategic use of space assets is becoming more accessible, allowing non-state actors to play a role in the space ecosystem. Access to space technologies significantly strengthens traditionally weak actors, making them more dangerous to states. The role that the Wagner group pioneered can be a lesson to the next rogue proxy who can replicate the same effects to the detriment of global security.

PaweÅ? Bernat, PhD, is a Senior Lecturer at the Polish Air Force University, where he teaches space security. His research interests focus on militarization of outer space, tactical and strategic use of space assets, and irregular, hybrid, and proxy warfare. His latest book, Proxy Wars From a Global Perspective: Non-State Actors and Armed Conflicts, coedited with C. GÃ¼rer and C.A. Kozera (London: Bloomsbury, 2023), depicts current proxy wars and analyzes the evolution of that way of waging war in the last two decades.

Cyprian Aleksander Kozera, PhD, is a visiting fellow at the University of South Wales with a military background. His research focuses on non-conventional warfare, irregular and proxy warfareâ??including the space domain. His recent publications include: â??Space Terrorism: A Historical Study,â?• (co-authored with P. Bernat) Safety & Defense, 9 (2): 80â??88, 2023, and Proxy Wars from a Global Perspective: Non-State Actors and Armed Conflicts (co-edited with P. Bernat, and C. GÃ¼rer), London: Bloomsbury, 2023.

The views expressed are those of the author(s) and do not reflect the official position of the Irregular Warfare Initiative, Princeton Universityâ??s Empirical Studies of Conflict Project, the Modern War

Institute at West Point, or the United States Government.

Main Image: Members of the Wagner group training Belarusian troops. (Photo via Wikimedia)

If you value reading the Irregular Warfare Initiative, please consider supporting our work. And for the best gear, check out the IWI store for mugs, coasters, apparel, and other items.

Date Created
2024/12/03